



## DEPARTMENT OF THE INTERIOR

### Fish and Wildlife Service

#### 50 CFR Part 17

[Docket No. FWS–R4–ES–2021–0053; FF09E21000 FXES11110900000 212]

RIN 1018–BF38

### Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat for the Miami Tiger Beetle (*Cicindelidia floridana*)

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Proposed rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service (Service), propose to designate critical habitat for the Miami tiger beetle (*Cicindelidia floridana*) under the Endangered Species Act (Act). In total, approximately 1,977 acres (ac) (800 hectares (ha)) in Miami-Dade County, Florida, fall within the boundaries of the proposed critical habitat designation. If we finalize this rule as proposed, it would extend the Act's protections to this species' critical habitat. We also announce the availability of a draft economic analysis of the proposed designation of critical habitat for the Miami tiger beetle.

**DATES:** We will accept comments received or postmarked on or before [INSERT DATE 60 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER]. Comments submitted electronically using the Federal eRulemaking Portal (see **ADDRESSES**, below) must be received by 11:59 p.m. Eastern Time on the closing date. We must receive requests for a public hearing, in writing, at the address shown in **FOR FURTHER INFORMATION CONTACT** by [INSERT DATE 45 DAYS AFTER DATE OF PUBLICATION IN THE

**ADDRESSES:** You may submit comments by one of the following methods:

(1) *Electronically:* Go to the Federal eRulemaking Portal:

<http://www.regulations.gov>. In the Search box, enter FWS–R4–ES–2021–0053, which is the docket number for this rulemaking. Then, click on the Search button. On the resulting page, in the Search panel on the left side of the screen, under the Document Type heading, check the Proposed Rule box to locate this document. You may submit a comment by clicking on “Comment.”

(2) *By hard copy:* Submit by U.S. mail to: Public Comments Processing, Attn: FWS–R4–ES–2021–0053, U.S. Fish and Wildlife Service, MS: PRB/3W, 5275 Leesburg Pike, Falls Church, VA 22041–3803.

We request that you send comments only by the methods described above. We will post all comments on <http://www.regulations.gov>. This generally means that we will post any personal information you provide us (see **Information Requested**, below, for more information).

*Availability of supporting materials:* For the critical habitat designation, the coordinates or plot points or both from which the maps are generated are included in the decision file for this rulemaking and are available at <http://www.regulations.gov> under Docket No. FWS–R4–ES–2021–0053 and at [www.fws.gov/verobeach/](http://www.fws.gov/verobeach/). Any supporting information that we developed for this critical habitat designation will be available on the Service’s website or at <http://www.regulations.gov>.

**FOR FURTHER INFORMATION CONTACT:** Roxanna Hinzman, Field Supervisor, U.S. Fish and Wildlife Service, Florida Ecological Services Field Office, 1339 20<sup>th</sup> Street, Vero Beach, FL 32960; telephone 772–562–3909. Persons who use a telecommunications device for the deaf (TDD) may call the Federal Relay Service at 800–877–8339.

## SUPPLEMENTARY INFORMATION:

### Executive Summary

*Why we need to publish a rule.* Under the Endangered Species Act, any species that is determined to be a threatened or endangered species requires critical habitat to be designated, to the maximum extent prudent and determinable. Designations and revisions of critical habitat can only be completed by issuing a rule.

*What this document does.* We propose the designation of critical habitat for the Miami tiger beetle, which is listed as endangered.

*The basis for our action.* Section 3(5)(A) of the Act defines critical habitat as (i) the specific areas within the geographical area occupied by the species, at the time it is listed, on which are found those physical or biological features (I) essential to the conservation of the species and (II) which may require special management considerations or protections; and (ii) specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination by the Secretary that such areas are essential for the conservation of the species. Section 4(b)(2) of the Act states that the Secretary must make the designation on the basis of the best scientific data available and after taking into consideration the economic impact, the impact on national security, and any other relevant impacts of specifying any particular area as critical habitat.

*Draft economic analysis of the proposed designation of critical habitat.* In order to consider the economic impacts of critical habitat for the Miami tiger beetle, we compiled information pertaining to the potential incremental economic impacts for this proposed critical habitat designation. The information we used in determining the economic impacts of the proposed critical habitat is summarized in this proposed rule (see *Consideration of Economic Impacts*) and is available at <http://www.regulations.gov> at Docket No. FWS–R4–ES–2021–0053

and at the Florida Ecological Services Field Office at <http://www.fws.gov/verobeach/> (see **FOR FURTHER INFORMATION CONTACT**). We are soliciting public comments on the economic information provided and any other potential economic impact of the proposed designation. We will continue to reevaluate the potential economic impacts between this proposal and our final designation.

*Public comment.* We are seeking comments and soliciting information from the public on our proposed designation to make sure we consider the best scientific and commercial information available in developing our final designation. Because we will consider all comments and information we receive during the comment period, our final determination may differ from this proposal. We will respond to and address comments received in our final rule.

*We will seek peer review.* We are seeking comments from independent specialists to ensure that our proposal is based on scientifically sound data and analyses. We have invited these peer reviewers to comment on our specific assumptions and conclusions in this critical habitat proposal.

### **Information Requested**

We intend that any final action resulting from this proposed rule will be based on the best scientific and commercial data available and be as accurate and as effective as possible. Therefore, we request comments or information from other governmental agencies, Native American Tribes, the scientific community, industry, or any other interested parties concerning this proposed rule. We particularly seek comments concerning:

(1) The reasons why we should or should not designate habitat as “critical habitat” under section 4 of the Act (16 U.S.C. 1531 *et seq.*), including information to inform the following factors that the regulations identify as reasons why designation of critical habitat may be not prudent:

(a) The species is threatened by taking or other human activity and identification of

critical habitat can be expected to increase the degree of such threat to the species;

(b) The present or threatened destruction, modification, or curtailment of a species' habitat or range is not a threat to the species, or threats to the species' habitat stem solely from causes that cannot be addressed through management actions resulting from consultations under section 7(a)(2) of the Act;

(c) Areas within the jurisdiction of the United States provide no more than negligible conservation value, if any, for a species occurring primarily outside the jurisdiction of the United States; or

(d) No areas meet the definition of critical habitat.

(2) Specific information on:

(a) The amount and distribution of Miami tiger beetle habitat;

(b) What areas, that were occupied at the time of listing and that contain the physical or biological features essential to the conservation of the species, should be included in the designation and why;

(c) Any additional areas occurring within the range of the species, in Miami-Dade County, that should be included in the designation because they (i) are occupied at the time of listing and contain the physical or biological features that are essential to the conservation of the species and that may require special management considerations, or (ii) are unoccupied at the time of listing and are essential for the conservation of the species;

(d) Special management considerations or protection that may be needed in critical habitat areas we are proposing, including managing for the potential effects of climate change; and

(e) What areas not occupied at the time of listing are essential for the conservation of the species. We particularly seek comments:

(i) Regarding whether occupied areas are adequate for the conservation of the species;

(ii) Providing specific information regarding whether or not unoccupied areas would,

with reasonable certainty, contribute to the conservation of the species and contain at least one physical or biological feature essential to the conservation of the species; and

(iii) Explaining whether or not unoccupied areas fall within the definition of “habitat” at 50 CFR 424.02 and why.

(iv) We have identified 14 units in this proposal that were unoccupied at the time of listing that we find are essential to the conservation of the Miami tiger beetle. Please provide specific comments and information on:

- whether each of these units are essential to the conservation of the Miami tiger beetle and should be included in critical habitat,
- whether there are specific units that are not essential and should not be included in critical habitat and why, and
- whether there are there any other specific areas not currently proposed that are essential to the conservation of the Miami tiger beetle that should be included in critical habitat.

(3) Any additional areas occurring within the range of the species, i.e., South Florida, that should be included in the designation because they (a) are occupied at the time of listing and contain the physical and biological features that are essential to the conservation of the species and that may require special management considerations, or (b) are unoccupied at the time of listing and are essential for the conservation of the species.

(4) Land use designations and current or planned activities in the subject areas and their possible impacts on proposed critical habitat.

(5) Information on the projected and reasonably likely impacts of climate change on Miami tiger beetle and proposed critical habitat.

(6) Information on the extent to which the description of probable economic impacts in the draft economic analysis is a reasonable estimate of the likely economic impacts; any probable economic, national security, or other relevant impacts of designating any area that may be included in the final designation, in particular, any impacts on small entities or families; and the

benefits of including or excluding areas that exhibit these impacts.

(7) Whether any specific areas we are proposing for critical habitat designation should be considered for exclusion under section 4(b)(2) of the Act, and whether the benefits of potentially excluding any specific area outweigh the benefits of including that area under section 4(b)(2) of the Act. In particular for those for which you think we should exclude any additional areas, please provide credible information regarding the existence of a meaningful economic or other relevant impact supporting a benefit of exclusion.

(8) Whether we could improve or modify our approach to designating critical habitat in any way to provide for greater public participation and understanding, or to better accommodate public concerns and comments.

Please include sufficient information with your submission (such as scientific journal articles or other publications) to allow us to verify any scientific or commercial information you include. Please note that submissions merely stating support for, or opposition to, the action under consideration without providing supporting information, although noted, will not be considered in making a final critical habitat determination

You may submit your comments and materials concerning this proposed rule by one of the methods listed in **ADDRESSES**. We request that you send comments only by the methods described in **ADDRESSES**.

If you submit information via <http://www.regulations.gov>, your entire submission—including any personal identifying information—will be posted on the website. If your submission is made via a hardcopy that includes personal identifying information, you may request at the top of your document that we withhold this information from public review. However, we cannot guarantee that we will be able to do so. We will post all hardcopy submissions on <http://www.regulations.gov>.

Comments and materials we receive, as well as supporting documentation we used in preparing this proposed rule, will be available for public inspection on

<http://www.regulations.gov>.

Because we will consider all comments and information we receive during the comment period, our final designation may differ from this proposal. Based on the new information we receive (and any comments on that new information), our final designation may not include all areas proposed, may include some additional areas that meet the definition of critical habitat, and may exclude some areas if we find the benefits of exclusion outweigh the benefits of inclusion.

### *Public Hearing*

Section 4(b)(5) of the Act provides for a public hearing on this proposal, if requested. Requests must be received by the date specified in **DATES**. Such requests must be sent to the address shown in **FOR FURTHER INFORMATION CONTACT**. We will schedule a public hearing on this proposal, if requested, and announce the date, time, and place of the hearing, as well as how to obtain reasonable accommodations, in the *Federal Register* and local newspapers at least 15 days before the hearing. For the immediate future, we will provide these public hearings virtually using webinars that will be announced on the Service's website, in addition to the *Federal Register*. The use of these virtual public hearings is consistent with our regulation at 50 CFR 424.16(c)(3).

### **Previous Federal Actions**

On December 22, 2015, we proposed to list the Miami tiger beetle as an endangered species under the Act (80 FR 79533) in the *Federal Register*. On October 5, 2016, we published our final determination in the *Federal Register* (81 FR 68985) and added the Miami tiger beetle as an endangered species to the List of Endangered and Threatened Wildlife at 50 CFR 17.11(h). At the time of our proposal we determined that critical habitat was prudent, but not determinable because we lacked specific information on the impacts of our designation. In our final listing rule, we stated we were in the process of obtaining information on the impacts of the designation. All previous Federal actions are described in detail in the proposal to list the Miami tiger beetle as an endangered species under the Act (80 FR 79533, December 22, 2015). Additional



information may be found in the final rule to list the Miami tiger beetle as an endangered species (81 FR 68985, October 5, 2016).

## **Critical Habitat**

### *Background*

Critical habitat is defined in section 3 of the Act as:

(1) The specific areas within the geographical area occupied by the species, at the time it is listed in accordance with the Act, on which are found those physical or biological features

(a) Essential to the conservation of the species, and

(b) Which may require special management considerations or protection; and

(2) Specific areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species.

Our regulations at 50 CFR 424.02 define the geographical area occupied by the species as an area that may generally be delineated around species' occurrences, as determined by the Secretary (i.e., range). Such areas may include those areas used throughout all or part of the species' life cycle, even if not used on a regular basis (e.g., migratory corridors, seasonal habitats, and habitats used periodically, but not solely, by vagrant individuals). Additionally, our regulations at 50 CFR 424.02 define the word "habitat" as follows: "for the purposes of designating critical habitat only, habitat is the abiotic and biotic setting that currently or periodically contains the resources and conditions necessary to support one or more life processes of a species."

Conservation, as defined under section 3 of the Act, means to use and the use of all methods and procedures that are necessary to bring an endangered or threatened species to the point at which the measures provided pursuant to the Act are no longer necessary. Such methods and procedures include, but are not limited to, all activities associated with scientific resources management such as research, census, law enforcement, habitat acquisition and maintenance,

propagation, live trapping, and transplantation, and, in the extraordinary case where population pressures within a given ecosystem cannot be otherwise relieved, may include regulated taking.

Critical habitat receives protection under section 7 of the Act through the requirement that Federal agencies ensure, in consultation with the Service, that any action they authorize, fund, or carry out is not likely to result in the destruction or adverse modification of critical habitat. The designation of critical habitat does not affect land ownership or establish a refuge, wilderness, reserve, preserve, or other conservation area. Such designation also does not allow the government or public to access private lands. Such designation does not require implementation of restoration, recovery, or enhancement measures by non-Federal landowners. Where a landowner requests Federal agency funding or authorization for an action that may affect a listed species or critical habitat, the Federal agency would be required to consult with the Service under section 7(a)(2) of the Act. However, even if the Service were to conclude that the proposed activity would result in destruction or adverse modification of the critical habitat, the Federal action agency and the landowner are not required to abandon the proposed activity, or to restore or recover the species; instead, they must implement “reasonable and prudent alternatives” to avoid destruction or adverse modification of critical habitat.

Under the first prong of the Act’s definition of critical habitat, areas within the geographical area occupied by the species at the time it was listed are included in a critical habitat designation if they contain physical or biological features (1) which are essential to the conservation of the species and (2) which may require special management considerations or protection. For these areas, critical habitat designations identify, to the extent known using the best scientific and commercial data available, those physical or biological features that are essential to the conservation of the species (such as space, food, cover, and protected habitat). In identifying those physical or biological features that occur in specific occupied areas, we focus on the specific features that are essential to support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, prey,

vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity.

Under the second prong of the Act's definition of critical habitat, we can designate critical habitat in areas outside the geographical area occupied by the species at the time it is listed, upon a determination that such areas are essential for the conservation of the species. The implementing regulations at 50 CFR 424.12(b)(2) further delineate unoccupied critical habitat by setting out three specific parameters: (1) when designating critical habitat, the Secretary will first evaluate areas occupied by the species; (2) the Secretary will consider unoccupied areas to be essential only where a critical habitat designation limited to geographical areas occupied by the species would be inadequate to ensure the conservation of the species; and (3) for an unoccupied area to be considered essential, the Secretary must determine that there is a reasonable certainty both that the area will contribute to the conservation of the species and that the area contains one or more of those physical or biological features essential to the conservation of the species.

Section 4 of the Act requires that we designate critical habitat based on the best scientific data available. Further, our Policy on Information Standards Under the Endangered Species Act (published in the *Federal Register* on July 1, 1994 (59 FR 34271)), the Information Quality Act (section 515 of the Treasury and General Government Appropriations Act for Fiscal Year 2001 (Pub. L. 106-554; H.R. 5658)), and our associated Information Quality Guidelines provide criteria, establish procedures, and provide guidance to ensure that our decisions are based on the best scientific data available. They require our biologists, to the extent consistent with the Act and with the use of the best scientific data available, to use primary and original sources of information as the basis for recommendations to designate critical habitat.

When we are determining which areas should be designated as critical habitat, our primary source of information is generally the information from the listing process for the species. Additional information sources may include any generalized conservation strategy, criteria, or outline that may have been developed for the species; the recovery plan for the species; articles in peer-reviewed journals; conservation plans developed by States and counties; scientific status surveys and studies; biological assessments; other unpublished materials; or experts' opinions or personal knowledge.

As the regulatory definition of "habitat" reflects (50 CFR 424.02), habitat is dynamic, and species may move from one area to another over time. We recognize that critical habitat designated at a particular point in time may not include all of the habitat areas that we may later determine are necessary for the recovery of the species. For these reasons, a critical habitat designation does not signal that habitat outside the designated area is unimportant or may not be needed for recovery of the species. Areas that are important to the conservation of the species, both inside and outside the critical habitat designation, will continue to be subject to: (1) Conservation actions implemented under section 7(a)(1) of the Act; (2) regulatory protections afforded by the requirement in section 7(a)(2) of the Act for Federal agencies to ensure their actions are not likely to jeopardize the continued existence of any endangered or threatened species; and (3) section 9 of the Act's prohibitions on taking any individual of the species, including taking caused by actions that affect habitat. Federally funded or permitted projects affecting listed species outside their designated critical habitat areas may still result in jeopardy findings in some cases. These protections and conservation tools will continue to contribute to recovery of the species. Similarly, critical habitat designations made on the basis of the best available information at the time of designation will not control the direction and substance of future recovery plans, habitat conservation plans (HCPs), or other species conservation planning efforts if new information available at the time of those planning efforts calls for a different outcome.

## **Prudency Determination**

Section 4(a)(3) of the Act, as amended, and implementing regulations (50 CFR 424.12) require that, to the maximum extent prudent and determinable, the Secretary shall designate critical habitat at the time the species is determined to be an endangered or threatened species. Our regulations (50 CFR 424.12(a)(1)) state that the Secretary may, but is not required to, determine that a designation would not be prudent in the following circumstances:

(i) The species is threatened by taking or other human activity and identification of critical habitat can be expected to increase the degree of such threat to the species;

(ii) The present or threatened destruction, modification, or curtailment of a species' habitat or range is not a threat to the species, or threats to the species' habitat stem solely from causes that cannot be addressed through management actions resulting from consultations under section 7(a)(2) of the Act;

(iii) Areas within the jurisdiction of the United States provide no more than negligible conservation value, if any, for a species occurring primarily outside the jurisdiction of the United States;

(iv) No areas meet the definition of critical habitat; or

(v) The Secretary otherwise determines that designation of critical habitat would not be prudent based on the best scientific data available.

As discussed in the final listing rule published on October 5, 2016 (81 FR 68985), there is currently imminent threat of take attributed to collection or vandalism identified under Factor B for this species. However, we have determined that the identification and mapping of critical habitat is not expected to increase any such threat because the location of the two extant populations of the Miami tiger beetle are currently known to the scientific community and public. Further, in our proposed listing determination for this species, we determined that the present or threatened destruction, modification, or curtailment of habitat or range is a threat, and

that those threats in some way can be addressed by section 7(a)(2) consultation measures. Also, the species occurs wholly in the jurisdiction of the United States, and we are able to identify areas that meet the definition of critical habitat. Therefore, because none of the circumstances enumerated in our regulations at 50 CFR 424.12(a)(1) have been met and because the Secretary has not identified other circumstances for which this designation of critical habitat would be not prudent, we have determined that the designation of critical habitat is prudent for the Miami tiger beetle.

### **Physical or Biological Features Essential to the Conservation of the Species**

In accordance with section 3(5)(A)(i) of the Act and regulations at 50 CFR 424.12(b), in determining which areas we will designate as critical habitat from within the geographical area occupied by the species at the time of listing, we consider the physical or biological features that are essential to the conservation of the species and that may require special management considerations or protection. The regulations at 50 CFR 424.02 define “physical or biological features essential to the conservation of the species” as the features that occur in specific areas and that are essential to support the life-history needs of the species, including, but not limited to, water characteristics, soil type, geological features, sites, prey, vegetation, symbiotic species, or other features. A feature may be a single habitat characteristic or a more complex combination of habitat characteristics. Features may include habitat characteristics that support ephemeral or dynamic habitat conditions. Features may also be expressed in terms relating to principles of conservation biology, such as patch size, distribution distances, and connectivity. For example, physical features essential to the conservation of the species might include gravel of a particular size required for spawning, alkaline soil for seed germination, protective cover for migration, or susceptibility to flooding or fire that maintains necessary early-successional habitat characteristics. Biological features might include prey species, forage grasses, specific kinds or ages of trees for roosting or nesting, symbiotic fungi, or a particular level of nonnative species consistent with conservation needs of the listed species. The features may also be combinations

of habitat characteristics and may encompass the relationship between characteristics or the necessary amount of a characteristic essential to support the life history of the species.

In considering whether features are essential to the conservation of the species, we may consider an appropriate quality, quantity, and spatial and temporal arrangement of habitat characteristics in the context of the life-history needs, condition, and status of the species. These characteristics include, but are not limited to, space for individual and population growth and for normal behavior; food, water, air, light, minerals, or other nutritional or physiological requirements; cover or shelter; sites for breeding, reproduction, or rearing (or development) of offspring; and habitats that are protected from disturbance.

We derive the specific physical or biological features essential for the Miami tiger beetle from studies of this species' habitat, ecology, and life history as described below. Additional information can be found in the final listing rule published in the *Federal Register* on October 5, 2016 (81 FR 68985).

#### *Space for Individual and Population Growth and for Normal Behavior*

The Miami tiger beetle is endemic to pine rockland habitat within the Northern Biscayne Pinelands of the Miami Rock Ridge in Miami-Dade County in South Florida. Descriptions of this habitat and its associated native plant species are provided in the proposed listing rule published on December 22, 2015 (80 FR 79533) (see Habitat section). Additional discussion may be found in the final listing rule published on October 5, 2016 (81 FR 68985). The Miami tiger beetle requires open or sparsely vegetated sandy areas within pine rockland habitat for thermoregulation (regulation of body temperature), foraging, reproduction, and larval development.

As a group, tiger beetles (Coleoptera: Cicindelidae) occupy ephemeral habitats where local extinction from habitat loss or degradation is common, so dispersal to establish new populations in distant habitat patches is a likely life history strategy for most species (Knisley 2015a, p. 10). Therefore, individuals of the species must be sufficiently abundant and occur

within an appropriate dispersal distance to adjacent suitable habitat so they can repopulate areas following local extirpations. Barriers to dispersal can disrupt otherwise normal metapopulation dynamics and contribute to imperilment.

Development and agriculture have reduced pine rockland habitat by 90 percent in mainland south Florida. Pine rockland habitat decreased from approximately 183,000 ac (74,000 ha) in the early 1900s to only 3,707 ac (1,500 ha) in 2014 (Possley et al. 2014, p. 154). The largest remaining intact pine rockland (approximately 5,716 ac (2,313 ha)) is Long Pine Key in Everglades National Park (Everglades). Outside of the Everglades, less than 2 percent of pine rocklands on the Miami Rock Ridge remain, and much of what is left are small remnants scattered throughout the Miami metropolitan area, isolated from other natural areas (Herndon 1998, p. 1; URS Corporation Southern 2007, p. 1).

The extreme rarity of high-quality pine rockland habitats supporting the Miami tiger beetle elevates the importance of remnant sites that still retain some pine rockland species. We consider pine rockland habitat to be the primary habitat for the Miami tiger beetle.

We do not have specific information regarding a minimum viable population size for the Miami tiger beetle or the amount of habitat needed to sustain a viable population. Recovery plans for *Cicindela puritana* (Puritan tiger beetle) and *C. dorsalis dorsalis* (Northeastern beach tiger beetle) consider a minimum viable population size to be at least 500–1,000 adults (Hill and Knisley 1993, p. 23; Hill and Knisley 1994, p. 31). A minimum viable population size of 500 adults was estimated for the Salt Creek tiger beetle (*Cicindela nevadica lincolniana*) (79 FR 26014, May 6, 2014). The best available data regarding the minimum area and number of individuals necessary for a viable population for the Miami tiger beetle come from information regarding the closely related Highlands tiger beetle (*Cicindelidia highlandensis*); the information describes estimates of a minimum of 100 adult Highlands tiger beetles in an area of at least 2.5–5.0 ac (1.0–2.0 ha) (Knisley and Hill 2013, p. 42). This estimate is based on observations of population stability for the Highlands tiger beetle, as well as survey data and literature from other



tiger beetle species (Knisley and Hill 2013, p. 42).

The Miami tiger beetle requires open or sparsely vegetated sandy areas within pine rockland habitat to meet their life-history requirements, as well as adjacent undeveloped habitat to facilitate dispersal and protect core habitat. Therefore, based on the information in the previous paragraph, we identify pine rockland habitats of at least 2.5–5.0 ac (1.0–2.0 ha) in size as a necessary physical feature for this species.

#### *Food, Water, Air, Light, Minerals, or Other Nutritional or Physiological Requirements*

*Food*—Miami tiger beetles are active diurnal predators that use their keen vision to detect movement of small arthropods and run quickly to capture prey with their well-developed jaws (mandibles). Although we do not have specific information on Miami tiger beetle diets, observations by various entomologists indicate small arthropods, especially ants, are the most common prey for tiger beetles. Over 30 kinds of insects from many families have been identified as prey for tiger beetles, and scavenging is also common in some species (Knisley and Schultz 1997, pp. 39, 103; Willis 1967, pp. 196–197). Ants were the most common prey of tiger beetles in Florida (Choate 1996, p. 2). Miami tiger beetle larvae are sedentary sit-and-wait predators that capture small prey passing over or near (within a few inches (in) (centimeters (cm)) their burrows on the soil surface. Larvae prey on small arthropods, similar to adults. Alterations or reductions in the prey base through pesticide exposure could affect foraging in of Miami tiger beetles.

*Water*—The Miami tiger beetle requires inland sandy pine rockland habitat that has moderately drained to well-drained terrain. Rainfall varies from an annual average over 64 in (163 cm) in the northwest portion of Miami-Dade County to between 48 and 56 in (122 and 143 cm), respectively, in the rest of the county (Service 1999, p. 3-167). The water table in the Miami Rock Ridge outside of the Everglades seldom reaches the surface (Service 1999, p. 3-167). The existence of larvae in shallow permanent burrows throughout their development

makes them susceptible to changes in groundwater levels. The effects of climate change and sea level rise, which predict higher intensity storms, more erratic rainfall (i.e., alterations to the amount and seasonality and rainfall) and especially changes in water levels due to storm surge and salinization of the water table, could result in vegetation shifts that may impact the species. Based on this, we identify water (particularly appropriate hydrological regimes) as a necessary feature for the Miami tiger beetle to carry out its life processes.

*Light*—The Miami tiger beetle requires open areas of pine rockland habitat with ample sunlight for behavioral thermoregulation, so they can successfully perform their normal activities, such as foraging, mating, and oviposition. Vegetation encroachment and lack of adequate pine rockland management threatens the amount of light necessary for the Miami tiger beetle. We identify light as a necessary feature for the Miami tiger beetle to carry out its life processes.

*Soil*—The Miami tiger beetle is endemic to pine rockland habitat within the Miami Rock Ridge. The Miami Rock Ridge has oolitic limestone (composed of spherical grains packed tightly) at or very near the surface and solution holes occasionally from where the surface limestone is dissolved by organic acids. There is typically very little soil development, consisting primarily of accumulations of low-nutrient sand, marl, clayey loam, and organic debris found in solution holes, depressions, and crevices on the limestone surface (Florida Natural Areas Inventory (FNAI) 2010, p. 62). However, sandy pockets can be found at the northern end of the Miami Rock Ridge (Northern Biscayne Pinelands), beginning from approximately North Miami Beach and extending south to approximately S.W. 216<sup>th</sup> Street (Service 1999, p. 3-162).

These sandy substrates provide the appropriate nutrients, moisture regime, and soil chemistry necessary for Miami tiger beetle reproduction. Burrows in the sand are used for eggs and developing larvae. In addition these sandy areas support a community of insect prey that allows the species to persist. Soil compaction could impact the species and its habitat.

Therefore, we identify substrates derived from calcareous limestone that provide habitat for the Miami tiger beetle to carry out its life processes to be a necessary feature for the Miami tiger beetle.

*Summary*—Based on the best available information, we conclude that the Miami tiger beetle requires open sandy areas in pine rockland habitat with little to no vegetation for thermoregulation, foraging, egg-laying, and larval development. We identify these characteristics as necessary physical and biological features for the species.

#### *Cover or Shelter*

The life cycle of the Miami tiger beetle occurs entirely within pine rocklands. Females place a single egg into a shallow burrow dug into the soil. The egg hatches, apparently after sufficient soil moisture, and the first instar larva digs a burrow at the site of oviposition (egg-laying). Larvae are closely associated with their burrows, which provide cover and shelter for anywhere from 2 months to 1 year or more, depending on climate, food availability, and the number of cohorts per year (Knisley 2015b, p. 28). Larvae remain in their burrows until they are adults, only extending beyond the burrow entrance to subdue arthropod prey. The adult flight period for the Miami tiger beetle lasts approximately 5 months (mid-May to mid-October) (Knisley 2015b, p. 27). Both larvae and adults are visual predators and require open habitat to locate prey. Open areas with dense vegetation no longer provide suitable habitat. However, vegetation adjacent to open sandy areas may also be important, as it may provide thermal refugia for the beetles to escape from high ground temperatures (Knisley 2014, p. 1). Miami tiger beetle habitat can also be impacted from trampling, which causes soil compaction and can lead to lethal impacts to adults or larvae or impacts to their habitat.

Based on the best available information, we conclude that the Miami tiger beetle requires pine rocklands, specifically those containing open or sparsely vegetated sandy patches.

### *Sites for Breeding, Reproduction, or Rearing (or Development) of Offspring*

Miami tiger beetle reproduction and larval development occurs entirely within pine rocklands. Both larvae and adults occupy the same habitats – open sandy patches interspersed with vegetation. Vegetation encroachment into the open sandy habitat patches, barriers to dispersal, trampling of the surface soil, reductions in prey base, and collection of beetles are factors that may reduce the reproductive potential of the species. Therefore, based on the information above, we identify pine rockland habitats that can support the species growth, distribution, and population expansion as required for this species.

### *Habitats Representative of the Historical, Geographical, and Ecological Distributions of the Species*

The Miami tiger beetle continues to occur in pine rockland habitats that are protected from incompatible human-use, but these areas are only partially representative of the species' historical, geographical, and ecological distribution because its range within these habitats has been reduced. The species is still found in pine rockland habitats, with open sandy areas of at least 2.5–5.0 ac (1.0–2.0 ha) in size. Representative pine rocklands are located on Federal, local, and private conservation lands that implement conservation measures benefitting the beetle.

Pine rockland is dependent on some degree of disturbance, most importantly from natural or prescribed fires (Loope and Dunevitz 1981, p. 5; Snyder *et al.* 2005, p. 1; Bradley and Saha 2009, p. 4; Saha *et al.* 2011, pp. 169–184; FNAI 2010, p. 62). These fires are a vital component in maintaining native vegetation and creating or maintaining open or sparsely vegetated sandy areas, within this ecosystem. Fires have historically burned in intervals of approximately 3 to 7 years (FNAI 2010, p. 3) typically started by lightning strikes during the frequent summer thunderstorms (FNAI 2010, p. 3). Without fire, successional climax from tropical pineland to rockland hammock is rapid, and the open areas required by the species are encroached with vegetation and leaf litter. In addition, displacement of native species by invasive, nonnative

plants often occurs.

Mechanical control or thinning of pine rockland vegetation may be another means of maintaining pine rockland habitat, but it cannot entirely replace fire because it does not have the same benefits related to removal of leaf litter and nutrient cycling. In addition, it may lead to trampling of adult or larval tiger beetles. Natural and prescribed fire remains the primary and ecologically preferred method for maintaining pine rockland habitat.

Hurricanes and other significant weather events can contribute to openings in the pine rockland habitat (FNAI 2010, p. 62) needed by the Miami tiger beetle; however, they can also be a source of significant and direct risk to the species. Given the few, isolated populations of the Miami tiger beetle within a location prone to storm influences (located approximately 5 miles (8 kilometers) from the coast), the species is at substantial risk from stochastic environmental events such as hurricanes, storm surges, and other extreme weather that can affect recruitment, population growth, and other population parameters. The substantial reduction in the historical range of the beetle in the past 80 years, and the few remaining populations, make the species less resilient to impacts than when its distribution was more widespread.

Therefore, based on the information above, we identify pine rockland management through natural or prescribed fire, or other disturbance regimes that maintain pine rockland habitat, such as weather events, to be necessary for this species.

#### *Summary of Essential Physical or Biological Features*

We derive the specific physical or biological features essential to the conservation of Miami tiger beetle from studies of the species' habitat, ecology, and life history. We have determined that the following physical or biological features are essential to the conservation of Miami tiger beetle:

1. South Florida pine rockland habitat of at least 2.5 ac (1 ha) in size that is maintained by natural or prescribed fire or other disturbance regimes; and
2. Open sandy areas within or directly adjacent to the south Florida pine rockland habitat

with little to no vegetation that allows for or facilitates normal behavior and growth such as thermoregulation, foraging, egg-laying, larval development, and habitat connectivity, which promotes the overall distribution and expansion of the species.

### *Special Management Considerations or Protection*

When designating critical habitat, we assess whether the specific areas within the geographical area occupied by the species at the time of listing contain features which are essential to the conservation of the species and which may require special management considerations or protection. The features essential to the conservation of this species may require special management considerations or protection to reduce the following threats: vegetation encroachment of pine rockland habitat; loss of pine rockland habitat due to development that further fragments or degrades the few remaining pine rockland parcels in Miami-Dade County; collection of the species; climate change and sea level rise; pesticide exposure; and demographic and environmental stochasticity. These threats are exacerbated by having only two small populations in a restricted geographic range, making this species particularly susceptible to extinction in the foreseeable future. For a detailed discussion of threats, see Summary of Factors Affecting the Species in our proposed listing rule published in the *Federal Register* on December 22, 2015 (80 FR 79533). Additional information may be found in the final listing rule published on October 5, 2016 (81 FR 68985).

Some of these threats can be addressed by special management considerations or protection while others (e.g., sea level rise, hurricanes, storm surge) are beyond the control of landowners and managers. However, even when landowners or land managers may not be able to control all the threats directly, they may be able to address the impacts of those threats.

Destruction of rock pinelands for economic development has reduced pine rockland habitat on the Miami Rock Ridge outside of the Everglades by over 98 percent, and remaining habitat in this area is highly fragmented. The Miami tiger beetle occurs on a mix of privately and publicly owned lands, only some of which are managed for conservation. Any occurrences

of the beetle on private land or non-conservation public land are vulnerable to the effects of habitat degradation if natural disturbance regimes are disrupted, because the species requires active management to keep the habitat functional in the absence of such disturbances. Prolonged lack of fire in pine rockland habitat leads to vegetation encroachment into the open or sparsely vegetated sandy areas that are required by the beetle. Further development and degradation of pine rocklands increases fragmentation and decreases the conservation value of the remaining functioning pine rockland habitat. In addition, pine rocklands are expected to be further degraded and fragmented due to anticipated sea level rise, which would fully or partially inundate some pine rocklands within the Miami Rock Ridge and cause increases in the salinity of the water table and soils resulting in vegetation shifts. Also, portions of the Richmond Pine Rocklands are proposed for commercial development and some existing pine rockland areas are projected to be developed for housing as the human population grows and adjusts to changing sea levels.

Pesticides used in and around pine rockland habitat are a potential threat to the Miami tiger beetle through direct exposure to adults and larvae, secondary exposure from insect prey, overall reduction in availability of adult and larval prey, thus limiting foraging opportunities, or any combination of these factors. Based on Miami-Dade Mosquito Control's implementation of spray buffers around pine rocklands occupied by the Miami tiger beetle, mosquito control pesticides are not considered a current threat for the species. However, if these buffers were to change or Miami tiger beetles were found in habitat without restrictions of pesticide applications, then the threat of exposure would need to be reevaluated.

The features essential to the conservation of the Miami tiger beetle (i.e., open or sparsely vegetated areas of pine rockland habitat that are at least 2.5–5.0 ac (1.0–2.0 ha) in size) may require special management considerations or protection to reduce threats. Actions that could ameliorate threats include, but are not limited to:

(1) Restoration and management of existing and potential Miami tiger beetle habitats throughout the Miami Rock Ridge using prescribed fire and control of invasive, nonnative plants;

(2) Protection of habitat adjacent to existing and new occurrences of the species to provide dispersal corridors, support the prey base, protect core habitat, and allow for appropriate habitat management;

(3) Use of pesticide spray buffers to prevent potential exposure to the species and probable limitation of foraging opportunities; and

(4) Establishment of additional populations within the Miami Rock Ridge through captive rearing and translocation of laboratory-reared individuals from wild populations.

#### *Criteria Used To Identify Critical Habitat*

As required by section 4(b)(2) of the Act, we use the best scientific data available to designate critical habitat. In accordance with the Act and our implementing regulations at 50 CFR 424.12(b), we review available information pertaining to the habitat requirements of the species and identify specific areas within the geographical area occupied by the species at the time of listing and any specific areas outside the geographical area occupied by the species to be considered for designation as critical habitat. We are proposing to designate critical habitat in areas within the geographical area occupied by the species at the time of listing in 2016. We also are proposing to designate specific areas outside the geographical area occupied by the species at the time of listing because we have determined that a designation limited to occupied areas would be inadequate to ensure the conservation of the species. Although we do not have definitive information that these areas were historically or are currently occupied by the Miami tiger beetle, they are within the historical range of the species, contain remnant south Florida pine rockland habitat and the essential physical or biological features, and have been determined to be essential for the conservation of the species, as further discussed below. We have determined that it is reasonably certain that the unoccupied areas will contribute to the



conservation of the species and contain one or more of the physical or biological features that are essential to the conservation of the species. We have also determined that the unoccupied areas fall within the regulatory definition of “habitat” at 50 CFR 424.02 since they have the abiotic and biotic features that currently or periodically contain the resources and conditions necessary to support one or more life processes of the Miami tiger beetle.

The historical range of the Miami tiger beetle is limited to Miami-Dade County, Florida, specifically within the Northern Biscayne Pinelands of the Miami Rock Ridge. Over 98 percent of the Miami Rock Ridge pine rocklands outside of the Everglades has been lost to development, reducing the current range of the Miami tiger beetle to the southern portion of the Northern Biscayne Pinelands, in the Richmond Pine Rocklands and Nixon Smiley Pineland Preserve.

We anticipate that recovery will require not only continued protection of the remaining extant populations and remnant pine rockland habitat but also establishment of populations in additional areas of Miami-Dade County to ensure there are adequate numbers of beetles and stable populations occurring over the entire geographic range of the Miami tiger beetle. This will help to reduce the chance that catastrophic events, such as storms, will simultaneously affect all known populations.

The two extant Miami tiger beetle populations are small and at risk of adverse effects from reduced genetic variation, an increased risk of inbreeding depression, and reduced reproductive output. In addition, the two populations are isolated from each other, decreasing the likelihood that they could be naturally reestablished if extirpation from one location would occur.

In selecting areas to propose for critical habitat designation, we used the conservation principles of the “three R’s”: resiliency, redundancy, and representation (Shaffer and Stein 2000, entire) for conserving imperiled species. Resiliency is the ability to sustain populations through the natural range of favorable and unfavorable conditions. Redundancy ensures an adequate number of sites with resilient populations such that the species has the ability to withstand

catastrophic events. Representation ensures adaptive capacity within a species and allows it to respond to environmental changes. This can be facilitated by conserving not just genetic diversity, but also the species' associated habitat type variation. Implementation of this methodology has been widely accepted as a reasonable conservation strategy (Tear *et al.* 2005, p. 841).

In order to ensure sufficient representation for the Miami tiger beetle, we described the physical and biological features (as discussed above) and identified areas of habitat that contain at least one or more of the features to provide for reintroduction and expansion of the Miami tiger beetle. Redundancy is currently low as only two populations remain, both on remnant pine rockland sites. Redundancy can be improved through the introduction of additional populations of the Miami tiger beetle at other pine rockland sites. However, throughout the species' range, the amount of suitable remaining pine rockland is limited (low resiliency), and much of the remaining habitat may be significantly altered due to the effects of climate change over the next century. Therefore, we reviewed available sites containing pine rockland habitat within the historical range of the species and evaluated each site for its potential conservation contribution based on quality of habitat, spatial arrangement relative to the two extant populations and each other, and existing protections and management of the habitat and sites to determine additional areas that are essential for the Miami tiger beetle's conservation.

#### Sources of Data to Identify Critical Habitat Boundaries

We have determined that the areas known to be occupied at the time of listing should be proposed for critical habitat designation. However, recognizing that occupied habitat alone is not adequate for the conservation of the Miami tiger beetle, we also used habitat and historical occurrence data to identify the historical range of the species and necessary habitat features to help us determine which unoccupied habitat areas are essential for the conservation of the species. To determine the general extent, location, and boundaries of critical habitat, the Service used Esri ArcGIS mapping software for mapping and calculating areas (Albers Conical Equal

Area (Florida Geographic Data Library), North American Datum of 1983 (NAD 83) High Accuracy Reference Network (HARN)) along with the following spatial data layers:

(1) Historical and current records of Miami tiger beetle occurrences and distributions found in publications, reports, personal communications, and associated voucher specimens housed at museums and private collections (Knisley 2015b, entire);

(2) Geographic information system (GIS) data showing the location and extent of documented occurrences of pine rockland habitat (Cooperative Land Cover Version 3.3. FWC and FNAI, 2018);

(3) Aerial imagery (Esri ArcGIS online basemap World Imagery. South Florida Water Management District GIS Services, Earthstar Geographics, Miami-Dade County, Florida Department of Environmental Protection, Esri, HERE, Garmin, SafeGraph, Ministry of Economy, Trade, and Industry of Japan and the U.S. National Aeronautics and Space Administration, U.S. Geological Survey, Environmental Protection Agency, National Park Service, U.S. Department of Agriculture (USDA). 2019.; and

(4) GIS data depicting soils and to determine the presence of physical or biological features (U.S. Department of Agriculture 2020).

When designating critical habitat, we consider future recovery efforts and conservation of the species. We have determined that all currently known occupied habitat should be proposed for critical habitat designation because any further degradation or loss of the extant populations or occupied habitat would increase the Miami tiger beetle's susceptibility to local extirpation and ultimately extinction. The species occurs in two populations, Richmond and Nixon Smiley, separated from each other by approximately 3.1 mi (5 km) of urban development.

We are also including pine rockland habitat within the Richmond Pine Rocklands directly adjacent to sites with documented occurrences in the Richmond population. Due to their proximity to documented occurrences, the continuity of habitat, and presence of all of the physical or biological features, we have included these acres as part of the occupied habitat

complex for this unit in accordance with 50 CFR 424.12(d). Additionally, we have determined these areas are essential for the conservation of the species because they protect the occupied sites within the Richmond population, provide dispersal corridors for the Richmond population, provide potential habitat for population expansion, and support prey-base populations. These areas are important to ensure redundancy for the species, and they improve the species' viability.

Lastly, we are including other suitable or potentially suitable pine rockland fragments outside of the Richmond Pine Rocklands and Nixon Smiley Pineland Preserve that are located within the beetle's historical range along the Northern Biscayne Pinelands of the Miami Rock Ridge but are not known to be currently occupied by the species. With only two known occupied areas, we have determined that these areas are essential for the conservation of the species because they will enable the establishment of new populations in additional areas that more closely approximate its historical distribution. Establishment of new populations will help ensure that there are adequate numbers of beetles in multiple populations over a wide geographic area, so that catastrophic events, such as storms, would be less likely to simultaneously affect all known populations.

The best available data regarding the minimum area and number of individuals necessary for a viable population come from information regarding the Highlands tiger beetle; the information describes estimates of a minimum of 100 adult Highlands tiger beetles in an area of at least 2.5–5.0 ac (1.0–2.0 ha) (Knisley and Hill 2013, p. 42). This estimate is based on observations of population stability for the Highlands tiger beetle, as well as survey data and literature from other tiger beetle species. From the remaining suitable or potentially suitable pine rockland fragments that were delineated for the Miami Rock Ridge, we excluded fragments below the 2.5-ac (1.0-ha) minimum area for a viable population. As such we evaluated the remaining unoccupied pine rockland habitat within and directly adjacent to the Northern Biscayne Pinelands of the Miami Rock Ridge to identify remnant pine rocklands with the highest quality habitat potential (i.e., actively managed to support pine rocklands) and of sufficient size

(patches at least 2.5 ac (1.0 ha)) to provide for the conservation of the Miami tiger beetle.

#### *Areas Occupied at the Time of Listing*

The two occupied critical habitat units were delineated around the only remaining extant Miami tiger beetle populations. They include the mapped extent of the populations that contain the physical or biological features essential to the conservation of the Miami tiger beetle. The two occupied units account for approximately 1,572 ac (636 ha) or 80 percent of the proposed designation of critical habitat for the Miami tiger beetle.

The delineation of proposed critical habitat included the area containing the extant populations based on occurrence records as well as all suitable habitat directly adjacent to those areas to allow for the continued protection and management of pine rockland habitat and to meet the needs of the species. Given the Miami tiger beetle's dependence on disturbance (i.e., fires, storms, or mechanical treatments) to maintain optimal habitat, the amount and location of optimal habitat is temporally and spatially dynamic.

#### *Areas Outside of the Geographical Range at the Time of Listing*

The Miami tiger beetle has been extirpated from its type-locality (the place where the species was first discovered) in North Miami and is historically unknown from any other locations. In addition to including areas of the two extant populations (Richmond Pine Rocklands and Nixon Smiley Pineland Preserve) in proposed critical habitat, we are proposing 14 unoccupied critical habitat units that we have determined are essential to the conservation of the Miami tiger beetle. These areas contain pine rockland habitat within the historical range in the Northern Biscayne Pinelands on the Miami Rock Ridge and encompass approximately 405 ac (164 ha) or 20 percent of proposed critical habitat. As discussed above, we have determined that recovery requires additional populations be established in high quality pine rockland habitat that is protected and actively managed. Following a review of available sites containing pine rockland habitat within the historical range of the species, we evaluated each site for its potential conservation contribution based on quality of habitat, spatial arrangement relative to the two

extant populations and each other, and existing protections and management. This review led to our determination that the most viable sites for introduction and conservation of the Miami tiger beetle are the 14 unoccupied sites identified in this proposal. As a result, we concluded that these 14 sites, which each contain all of the physical or biological features, have the highest probability for the conservation of the species and are essential to the conservation of the species. Thus, we are proposing them as critical habitat for the Miami tiger beetle.

We used the best available data to delineate existing pine rockland habitat units that are of sufficient size to support introduced populations of Miami tiger beetles and that are spatially configured to support metapopulation dynamics and to minimize adverse impacts from stochastic events. In identifying these areas, we considered the following refining criteria:

(1) Areas of sufficient size to support ecosystem processes for populations of the Miami tiger beetle. The best available information indicates that appropriately sized units should be at a minimum 2.5–5.0 ac (1.0–2.0 ha). Large contiguous parcels of habitat are more likely to be resilient to ecological processes of disturbance and are more likely to support a viable population of the Miami tiger beetle. The unoccupied areas selected ranged from 7 ac (3 ha) in size to 89 ac (36 ha).

(2) Areas to maintain connectivity of habitat to allow for population expansion. Isolation of habitat can prevent recolonization of the Miami tiger beetle and result in local extirpation and ultimately extinction. To ameliorate the dangers associated with small populations or limited distributions, we have identified areas of critical habitat that will allow for the natural expansion of populations or support reintroductions.

(3) Restored pine rockland habitats may allow the Miami tiger beetle to disperse, recolonize, or expand from areas already occupied by the beetle. These restored areas generally are habitats within or adjacent to pine rocklands that have been affected by natural or anthropogenic factors but retain the essential physical or biological features that make them suitable for the beetle. These areas would help offset the anticipated loss and degradation of

habitat occurring or expected from natural succession in the absence of disturbance, effects of climate change (such as sea level rise), or development.

### *Summary*

In summary, for areas within the geographical area occupied by the species at the time of listing, we delineated critical habitat unit boundaries using the following criteria:

(1) Evaluated habitat suitability of pine rockland habitat within the geographical area occupied at the time of listing (current), and selected those areas that contain all of the physical or biological features to support life-history functions essential for conservation of the species;

(2) Identified open sandy areas directly adjacent to occupied areas and with little to no vegetation that allow for or facilitate normal behavior and growth of the Miami tiger beetle, such as thermoregulation, foraging, egg-laying, larval development, and habitat connectivity, and which promote the overall distribution and expansion of the species.

The result was the inclusion of two units of critical habitat occupied by the Miami tiger beetle. Approximately 1,052 ac (426 ha) or 73 percent of the occupied units are existing critical habitat for other species.

For areas outside the geographical area occupied by the species at the time of listing, we delineated critical habitat unit boundaries using the following criteria:

(1) Areas with pine rockland habitat that contained the essential physical or biological features and were of sufficient size to support introduced populations of Miami tiger beetles;

(2) Areas that are spatially configured to support metapopulation dynamics, minimize adverse impacts from stochastic events, and maintain representation of the historical range of the species.

The result was the inclusion of 14 units of critical habitat not occupied by the Miami tiger beetle at the time of listing. These 14 units encompass approximately 405 ac (164 ha) or 20 percent of proposed critical habitat. All 14 units are either publicly owned or privately owned conservation lands (i.e., Porter Pineland Preserve, which is owned and managed by the Audubon

Society).

When determining proposed critical habitat boundaries, we made every effort to avoid including developed areas such as lands covered by buildings, pavement, and other structures because such lands lack physical or biological features necessary for the Miami tiger beetle. The scale of the maps we prepared under the parameters for publication within the Code of Federal Regulations may not reflect the exclusion of such developed lands. Any such lands inadvertently left inside critical habitat boundaries shown on the maps of this proposed rule have been excluded by text in the proposed rule and are not proposed for designation as critical habitat. Therefore, if the critical habitat is finalized as proposed, a Federal action involving these lands would not trigger section 7 consultation with respect to critical habitat and the requirement of no adverse modification unless the specific action would affect the essential physical or biological features in the adjacent critical habitat.

We are proposing for designation as critical habitat those lands that we have determined are occupied at the time of listing and which contain the physical or biological features to support life-history processes essential to the conservation of the species, and lands outside of the geographical area occupied at the time of listing that we have determined are essential for the conservation of the Miami tiger beetle.

The critical habitat designation is defined by the maps, as modified by any accompanying regulatory text, presented at the end of this document in the rule portion. We include more detailed information on the boundaries of the critical habitat designation in the preamble of this document. We will make shapefiles of the critical habitat units available to the public on <http://www.regulations.gov> at Docket No. FWS-R4-ES-2021-0053, and on our Internet site [www.fws.gov/verobeach/](http://www.fws.gov/verobeach/).

### **Proposed Critical Habitat Designation**

We are proposing 16 units as critical habitat for the Miami tiger beetle. The critical



habitat areas we describe below constitute our current best assessment of areas that meet the definition of critical habitat for the Miami tiger beetle. Table 1 shows each critical habitat unit, its occupancy by the Miami tiger beetle at the time it was listed under the Act, and the extent of overlap with critical habitat previously designated for other federally listed species.

TABLE 1—PROPOSED CRITICAL HABITAT UNITS FOR THE MIAMI TIGER BEETLE, INCLUDING OCCUPANCY AND EXTENT OF OVERLAPPING CRITICAL HABITAT FOR OTHER FEDERALLY LISTED SPECIES

Unit No.	Unit Name	Occupancy at Time of Listing	Total Area (ac (ha))	Area of Overlap with Existing Critical Habitat (ac (ha))	Area Exclusive to Miami Tiger Beetle (ac (ha))
1	Trinity Pineland	No	10 (4)	10 (4)	0 (0)
2	Rockdale Pineland	No	39 (16)	38 (15)	1 (<1)
3	Deering Estate South Edition	No	16 (6)	15 (6)	1 (<1)
4	Ned Glenn Nature Preserve	No	11 (5)	11 (5)	0 (0)
5	Deering Estate at Cutler	No	89 (36)	84 (34)	5 (2)
6	Silver Palm Groves Pineland	No	25 (10)	22 (9)	3 (1)
7	Quail Roost Pineland	No	48 (19)	47 (19)	1 (<1)
8	Eachus Pineland	No	17 (7)	17 (7)	0 (0)
9	Bill Sadowski Park	No	20 (8)	19 (8)	1 (<1)
10	Tamiami Pineland Complex Addition	No	21 (8)	19 (8)	2 (<1)
11	Pine Shore Pineland Preserve	No	8 (3)	8 (3)	0 (0)
12	Nixon Smiley Pineland Preserve	Yes	117 (47)	115 (47)	2 (<1)
13	Camp Matecumbe	No	81 (33)	77 (31)	3 (1)
14	Richmond Pine Rocklands	Yes	1,455 (589)	937 (379)	518 (210)
15	Calderon Pineland	No	14 (6)	14 (6)	0 (0)
16	Porter Pineland Preserve	No	7 (3)	7 (3)	0 (0)
Total			1,977 (800)	1,440 (583)	537 (217)

Note: Area sizes may not sum due to rounding.

Approximately 73 percent (1,440 ac (583 ha)) of the critical habitat proposed for the Miami tiger beetle overlaps with currently designated Federal critical habitat for the Carter's small-flowered flax (*Linum carteri* var. *carteri*), the Florida brickell-bush (*Brickellia mosieri*), Bartram's scrub-hairstreak butterfly (*Strymon acis bartrami*), and the Florida leafwing butterfly (*Anaea troglodyta floridalis*). Further, approximately 4 percent (17 ac (7 ha)) of unoccupied

critical habitat proposed is unique to the Miami tiger beetle, i.e., does not overlap with existing designated Federal critical habitat. Please refer to Table 1 above for the area of overlap with other federally designated critical habitat and to specific unit descriptions below for which currently designated Federal critical habitat overlaps with each proposed critical habitat unit for the Miami tiger beetle.

Tables 2 and 3 below show the approximate land ownership for each critical habitat unit and the proportion of critical habitat for each landownership category, respectively. All but 1 ac (0.6 ha) of the area proposed for designation is either publicly or privately owned for conservation.

TABLE 2—PROPOSED CRITICAL HABITAT UNITS FOR THE MIAMI TIGER BEETLE BY LAND OWNERSHIP

Critical Habitat Unit	Area (ac (ha))	Land Ownership			
		Federal	State	County	Private
1—Trinity Pineland	10 (4)		10 (4)		
2—Rockdale Pineland	39 (16)		38 (15)	1 (<1)	
3—Deering Estate South Edition	16 (6)		16 (6)		
4—Ned Glenn Nature Preserve	11 (5)			11 (5)	
5—Deering Estate at Cutler	89 (36)			89 (36)	
6—Silver Palm Groves Pineland	25 (10)		20 (8)	5 (2)	
7—Quail Roost Pineland	48 (19)		48 (19)		
8—Eachus Pineland	17 (7)			17 (7)	
9—Bill Sadowski Park	20 (8)			20 (8)	
10—Tamiami Pineland Complex Addition	21 (8)		21 (8)		
11—Pine Shore Pineland Preserve	8 (3)			8 (3)	
12—Nixon Smiley Pineland Preserve	117 (47)			117 (47)	
13—Camp Matecumbe	81 (33)		76 (31)	5 (2)	
14—Richmond Pine Rocklands	1,455 (589)	488 (198)		844 (341)	123 (50)
15—Calderon Pineland	14 (6)			14 (6)	
16—Porter Pineland Preserve	7 (3)				7 (3)
Total	1,977 (800)	488 (198)	229 (93)	1,130 (457)	131 (53)

Note: Area sizes may not sum due to rounding.

TABLE 3—PROPORTIONMENT OF LAND OWNERSHIP FOR PROPOSED CRITICAL HABITAT FOR THE MIAMI TIGER BEETLE

Land Ownership	Area (ac (ha))	Percent Ownership
Federal	488 (197)	25%
State	229 (93)	12%
County	1,130 (457)	57%
Private	131 (53)	7%
Total	1,977 (800)	

Note: Area sizes may not sum due to rounding.

In addition, over half of the proposed critical habitat for the Miami tiger beetle (1,219 ac (493 ha) or 62 percent) is under a Miami-Dade County Natural Forest Communities (NFC) designation. Miami-Dade County's NFC designation enacts regulations on habitat alterations to minimize damage to and protect environmentally sensitive forest lands, including pine rocklands. NFC regulations are designed to prevent clearing or destruction of native vegetation within preserved areas. Please see the unit descriptions below for the specific amount of each unit that is enrolled in the NFC program.

We present brief descriptions of each proposed critical habitat units and the justification for why each meets the definition of critical habitat for the Miami tiger beetle, below.

#### *Unit 1: Trinity Pineland*

Unit 1 consists of approximately 10 ac (4 ha) of State-owned land in Miami-Dade County. The unit is within the historical range of the Miami tiger beetle, although we are not aware of any records of historical occupancy of the unit. This unit includes pine rockland habitat within the Northern Biscayne Pinelands of the Miami Rock Ridge. This unit includes all the physical or biological features essential for the conservation of the species and is protected and actively managed to maintain a healthy pine rockland habitat.

This unit is currently unoccupied by the Miami tiger beetle but is essential for the conservation of the species because it serves to protect habitat needed to recover the species, reestablish wild populations within the historical range of the species, and maintain populations

throughout the historical distribution of the species in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should the Miami tiger beetle be extirpated from one of its current locations. Given this unit contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial distribution falling within the range of the species, we are reasonably certain that the lands and habitat within this unit will contribute to the conservation of the Miami tiger beetle.

The Natural Areas Management Division of Miami-Dade County Parks, Recreation and Open Spaces Department conducts nonnative species control, prescribed fire, and mechanical vegetation treatments on lands owned or managed by Miami-Dade County, including this unit. These actions help improve habitat that could support the Miami tiger beetle.

The entirety of Unit 1 overlaps with designated critical habitat for Carter's small-flowered flax and Florida brickell-bush. Additionally, approximately 8 ac (3 ha) or 80 percent of Unit 1 is enrolled in the NFC program.

#### *Unit 2: Rockdale Pineland*

Unit 2 consists of approximately 39 ac (16 ha) of State (38 ac (15 ha)) and county (1 ac (<1 ha)) owned lands in Miami-Dade County. The unit is within the historical range of the Miami tiger beetle, although we are not aware of any records of historical occupancy of the unit. This unit includes remnant pine rockland habitat within the Northern Biscayne Pinelands of the Miami Rock Ridge. This unit includes all the physical or biological features essential to the conservation of the species identified for the Miami tiger beetle and is protected and actively managed to maintain healthy pine rockland habitat.

This unit is currently unoccupied by the Miami tiger beetle but is essential for the conservation of the species because it serves to protect habitat needed to recover the species, reestablish wild populations within the historical range of the species, and maintain populations throughout the historical distribution of the species in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should the Miami tiger beetle be extirpated

from one of its current locations. Given this unit contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial distribution falling within the range of the species, we are reasonably certain that the lands and habitat within this unit will contribute to the conservation of the Miami tiger beetle.

The Natural Areas Management Division of Miami-Dade County Parks, Recreation and Open Spaces Department conducts nonnative species control, prescribed fire, and mechanical vegetation treatments on lands owned by Miami-Dade County. The actions help improve habitat that could support the Miami tiger beetle.

All but 1 ac (<1 ha) of Unit 2 overlaps with designated critical habitat for Carter's small-flowered flax and Florida brickell-bush. Additionally, approximately 28 ac (11 ha) or 72 percent of Unit 2 are enrolled in the NFC program.

### *Unit 3: Deering Estate South Edition*

Unit 3 consists of approximately 16 ac (6 ha) of State-owned land in Miami-Dade County. The unit is within the historical range of the Miami tiger beetle, although we are not aware of any records of historical occupancy of the unit. This unit includes remaining pine rockland habitat within the Northern Biscayne Pinelands of the Miami Rock Ridge. This unit includes all the physical or biological features essential for the conservation of the species and is protected and actively managed to maintain healthy pine rockland habitat.

This unit is currently unoccupied by the Miami tiger beetle but is essential for the conservation of the species because it serves to protect habitat needed to recover the species, reestablish wild populations within the historical range of the species, and maintain populations throughout the historical distribution of the species in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should the Miami tiger beetle be extirpated from one of its current locations. Given this unit contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial distribution falling within the range of the species, we are reasonably certain that the lands and

habitat within this unit will contribute to the conservation of the Miami tiger beetle.

The Natural Areas Management Division of Miami-Dade County Parks, Recreation and Open Spaces Department conducts nonnative species control, prescribed fire, and mechanical vegetation treatments on lands owned or managed by Miami-Dade County, including this unit. The actions help improve habitat that could support the Miami tiger beetle.

All but 1 ac (<1 ha) of Unit 3 overlaps with designated critical habitat for Carter's small-flowered flax and Florida brickell-bush. Additionally, approximately 15 ac (6 ha) or 94 percent of Unit 3 is enrolled in the NFC program.

#### *Unit 4: Ned Glenn Nature Preserve*

Unit 4 consists of approximately 11 ac (5 ha) of county-owned land in Miami-Dade County. The unit is within the historical range of the Miami tiger beetle, although we are not aware of any records of historical occupancy of the unit. This unit includes remaining pine rockland habitat within the Northern Biscayne Pinelands of the Miami Rock Ridge. This unit includes all the physical or biological features essential to the conservation of the species and is protected and actively managed to maintain healthy pine rockland habitat.

This unit is currently unoccupied by the Miami tiger beetle but is essential for the conservation of the species because it serves to protect habitat needed to recover the species, reestablish wild populations within the historical range of the species, and maintain populations throughout the historical distribution of the species in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should the Miami tiger beetle be extirpated from one of its current locations. Given this unit contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial distribution falling within the range of the species, we are reasonably certain that the lands and habitat within this unit will contribute to the conservation of the Miami tiger beetle.

The Natural Areas Management Division of Miami-Dade County Parks, Recreation and Open Spaces Department conducts nonnative species control, prescribed fire, and mechanical

vegetation treatments on lands owned by Miami-Dade County. The actions help improve habitat that could support the Miami tiger beetle.

The entirety of Unit 4 overlaps with designated critical habitat for Carter's small-flowered flax and Florida brickell-bush. Additionally, approximately 11 ac (4 ha) or 100 percent of Unit 4 is enrolled in the NFC program.

*Unit 5: Deering Estate at Cutler*

Unit 5 consists of approximately 89 ac (36 ha) of county-owned land in Miami-Dade County. The unit is within the historical range of the Miami tiger beetle, although we are not aware of any records of historical occupancy of the unit. This unit includes remaining pine rockland habitat within the Northern Biscayne Pinelands of the Miami Rock Ridge. This unit includes all the physical or biological features essential to the conservation of the species and is protected and actively managed to maintain healthy pine rockland habitat.

This unit is currently unoccupied by the Miami tiger beetle but is essential for the conservation of the species because it serves to protect habitat needed to recover the species, reestablish wild populations within the historical range of the species, and maintain populations throughout the historical distribution of the species in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should the Miami tiger beetle be extirpated from one of its current locations. Given this unit contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial distribution falling within the range of the species, we are reasonably certain that the lands and habitat within this unit will contribute to the conservation of the Miami tiger beetle.

The Natural Areas Management Division of Miami-Dade County Parks, Recreation and Open Spaces Department conducts nonnative species control, prescribed fire, and mechanical vegetation treatments on lands owned by Miami-Dade County. The actions help improve habitat that could support the Miami tiger beetle.

All but 5 ac (2 ha) of Unit 5 overlaps with designated critical habitat for Carter's small-

flowered flax and Florida brickell-bush. Additionally, approximately 84 ac (34 ha) or 94 percent of Unit 5 is enrolled in the NFC program.

*Unit 6: Silver Palm Groves Pineland*

Unit 6 consists of approximately 25 ac (10 ha) of State (20 ac (8 ha)) and county (5 ac (2 ha)) owned lands in Miami-Dade County. The unit is within the historical range of the Miami tiger beetle, although we are not aware of any records of historical occupancy of the unit. This unit includes remaining pine rockland habitat within the Northern Biscayne Pinelands of the Miami Rock Ridge. This unit includes all the physical or biological features essential to the conservation of the species and is protected and actively managed to maintain healthy pine rockland habitat.

This unit is currently unoccupied by the Miami tiger beetle but is essential for the conservation of the species because it serves to protect habitat needed to recover the species, reestablish wild populations within the historical range of the species, and maintain populations throughout the historical distribution of the species in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should the Miami tiger beetle be extirpated from one of its current locations. Given this unit contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial distribution falling within the range of the species, we are reasonably certain that the lands and habitat within this unit will contribute to the conservation of the Miami tiger beetle.

The Natural Areas Management Division of Miami-Dade County Parks, Recreation and Open Spaces Department conducts nonnative species control, prescribed fire, and mechanical vegetation treatments on lands owned by Miami-Dade County. The actions help improve habitat that could support the Miami tiger beetle.

All but 3 ac (1 ha) of Unit 6 overlaps with designated critical habitat for Bartram's scrub-hairstreak butterfly, Carter's small-flowered flax, and Florida brickell-bush. Additionally, approximately 18 ac (7 ha) or 72 percent of Unit 6 is enrolled in the NFC program.



### *Unit 7: Quail Roost Pineland*

Unit 7 consists of approximately 48 ac (19 ha) of State-owned land in Miami-Dade County. The unit is within the historical range of the Miami tiger beetle, although we are not aware of any records of historical occupancy of the unit. This unit includes remaining pine rockland habitat within the Northern Biscayne Pinelands of the Miami Rock Ridge. This unit includes all the physical or biological features essential to the conservation of the species and is protected and actively managed to maintain healthy pine rockland habitat.

This unit is currently unoccupied by the Miami tiger beetle but is essential for the conservation of the species because it serves to protect habitat needed to recover the species, reestablish wild populations within the historical range of the species, and maintain populations throughout the historical distribution of the species in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should the Miami tiger beetle be extirpated from one of its current locations. Given this unit contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial distribution falling within the range of the species, we are reasonably certain that the lands and habitat within this unit will contribute to the conservation of the Miami tiger beetle. The Natural Areas Management Division of Miami-Dade County Parks, Recreation and Open Spaces Department conducts nonnative species control, prescribed fire, and mechanical vegetation treatments on lands owned or managed by Miami-Dade County, including this unit. The actions help improve habitat that could support the Miami tiger beetle.

All but 1 ac (<1 ha) of Unit 7 overlaps with designated critical habitat for Bartram's scrub-hairstreak butterfly, Carter's small-flowered flax, and Florida brickell-bush. Additionally, approximately 32 ac (13 ha) or 67 percent of Unit 7 is enrolled in the NFC program.

### *Unit 8: Eachus Pineland*

Unit 8 consists of approximately 17 ac (7 ha) of county lands in Miami-Dade County. The unit is within the historical range of the Miami tiger beetle, although we are not aware of

any records of historical occupancy of the unit. This unit includes remaining pine rockland habitat in the Northern Biscayne Pinelands of the Miami Rock Ridge. This unit includes all the physical or biological features essential to the conservation of the species and is protected and actively managed to maintain healthy pine rockland habitat.

This unit is currently unoccupied by the Miami tiger beetle but is essential for the conservation of the species because it serves to protect habitat needed to recover the species, reestablish wild populations within the historical range of the species, and maintain populations throughout the historical distribution of the species in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should the Miami tiger beetle be extirpated from one of its current locations. Given this unit contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial distribution falling within the range of the species, we are reasonably certain that the lands and habitat within this unit will contribute to the conservation of the Miami tiger beetle.

The Natural Areas Management Division of Miami-Dade County Parks, Recreation and Open Spaces Department conducts nonnative species control, prescribed fire, and mechanical vegetation treatments on lands owned by Miami-Dade County. The actions help improve habitat that could support the Miami tiger beetle.

The entirety of Unit 8 overlaps with designated critical habitat for Carter's small-flowered flax and Florida brickell-bush. Additionally, approximately 14 ac (6 ha) or 82 percent of Unit 8 is enrolled in the NFC program.

#### *Unit 9: Bill Sadowski Park*

Unit 9 consists of approximately 20 ac (8 ha) of county-owned lands in Miami-Dade County. The unit is within the historical range of the Miami tiger beetle, although we are not aware of any records of historical occupancy of the unit. This unit includes remaining pine rockland habitat within the Northern Biscayne Pinelands of the Miami Rock Ridge. This unit includes all the physical or biological features essential to the conservation of the species and is

protected and actively managed to maintain healthy pine rockland habitat.

This unit is currently unoccupied by the Miami tiger beetle but is essential for the conservation of the species because it serves to protect habitat needed to recover the species, reestablish wild populations within the historical range of the species, and maintain populations throughout the historical distribution of the species in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should the Miami tiger beetle be extirpated from one of its current locations. Given this unit contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial distribution falling within the range of the species, we are reasonably certain that the lands and habitat within this unit will contribute to the conservation of the Miami tiger beetle.

The Natural Areas Management Division of Miami-Dade County Parks, Recreation and Open Spaces Department conducts nonnative species control, prescribed fire, and mechanical vegetation treatments on lands owned by Miami-Dade County. The actions help improve habitat that could support the Miami tiger beetle.

All but 1 ac (<1 ha) of Unit 9 overlaps with designated critical habitat for Carter's small-flowered flax and Florida brickell-bush. Additionally, approximately 19 ac (8 ha) or 95 percent of Unit 9 is enrolled in the NFC program.

#### *Unit 10: Tamiami Pineland Complex Addition*

Unit 10 consists of approximately 21 ac (8 ha) of State-owned lands in Miami-Dade County. The unit is within the historical range of the Miami tiger beetle, although we are not aware of any records of historical occupancy of the unit. This unit includes remaining pine rockland habitat within the Northern Biscayne Pinelands of the Miami Rock Ridge. This unit includes all the physical or biological features essential to the conservation of the species and is protected and actively managed to maintain healthy pine rockland habitat.

This unit is currently unoccupied by the Miami tiger beetle but is essential for the conservation of the species because it serves to protect habitat needed to recover the species,

reestablish wild populations within the historical range of the species, and maintain populations throughout the historical distribution of the species in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should the Miami tiger beetle be extirpated from one of its current locations. Given this unit contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial distribution falling within the range of the species, we are reasonably certain that the lands and habitat within this unit will contribute to the conservation of the Miami tiger beetle.

The Natural Areas Management Division of Miami-Dade County Parks, Recreation and Open Spaces Department conducts nonnative species control, prescribed fire, and mechanical vegetation treatments on lands owned or managed by Miami-Dade County, including this unit. The actions help improve habitat that could support the Miami tiger beetle.

All but 2 ac (<1 ha) of Unit 10 overlaps with designated critical habitat for Bartram's scrub-hairstreak butterfly, Carter's small-flowered flax, and Florida brickell-bush. Additionally, approximately 18 ac (7 ha) or 86 percent of Unit 10 is enrolled in the NFC program.

#### *Unit 11: Pine Shore Pineland Preserve*

Unit 11 consists of approximately 8 ac (3 ha) of county-owned lands in Miami-Dade County. The unit is within the historical range of the Miami tiger beetle, although we are not aware of any records of historical occupancy of the unit. This unit includes remaining pine rockland habitat within the Northern Biscayne Pinelands of the Miami Rock Ridge. This unit includes all the physical or biological features essential to the conservation of the species and is protected and actively managed to maintain healthy pine rockland habitat.

This unit is currently unoccupied by the Miami tiger beetle but is essential for the conservation of the species because it serves to protect habitat needed to recover the species, reestablish wild populations within the historical range of the species, and maintain populations throughout the historical distribution of the species in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should the Miami tiger beetle be extirpated

from one of its current locations. Given this unit contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial distribution falling within the range of the species, we are reasonably certain that the lands and habitat within this unit will contribute to the conservation of the Miami tiger beetle.

The Natural Areas Management Division of Miami-Dade County Parks, Recreation and Open Spaces Department conducts nonnative species control, prescribed fire, and mechanical vegetation treatments on lands owned by Miami-Dade County. The actions help improve habitat that could support the Miami tiger beetle.

The entirety of Unit 11 overlaps with designated critical habitat for Carter's small-flowered flax and Florida brickell-bush. Additionally, approximately 7 ac (3 ha) or 86 percent of Unit 11 is enrolled in the NFC program.

#### *Unit 12: Nixon Smiley Pineland Preserve*

Unit 12 consists of approximately 117 ac (47 ha) of county-owned lands in Miami-Dade County. This unit was occupied at the time of listing and is currently occupied by the Miami tiger beetle. While surveys of this site have been inconsistent in level of effort, timing, and frequency, they have primarily focused on the habitat previously known to be occupied: The open, sandy areas on the western half of the property.

This occupied habitat contains all of the physical or biological features, including pine rockland habitat (of sufficient size) with open or sparsely vegetated sandy areas that allow for thermoregulation, foraging, egg-laying, larval development, species dispersal, and population expansion, and natural or artificial disturbance regimes. The physical or biological features in this unit are protected and actively managed to maintain healthy pine rockland habitat. They may require additional special management considerations or protection to address threats of habitat loss and fragmentation, inadequate fire management, vegetation encroachment, collection, small population size, and sea level rise. In some cases, there are management actions being implemented to reduce some of these threats, and continued coordination with our

partners and landowners are ongoing to implement needed actions. This unit is occupied by one of two extant populations of Miami tiger beetle, contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial distribution falling within the range of the species.

The Natural Areas Management Division of Miami-Dade County Parks, Recreation and Open Spaces Department conducts nonnative species control, prescribed fire, and mechanical vegetation treatments on lands owned by Miami-Dade County. The actions help improve habitat that could support the Miami tiger beetle.

All but 2 ac (<1 ha) of Unit 12 overlaps with designated critical habitat for Bartram's scrub-hairstreak butterfly, Carter's small-flowered flax, and Florida brickell-bush. Additionally, approximately 112 ac (47 ha) or 96 percent of Unit 12 is enrolled in the NFC program.

#### *Unit 13: Camp Matecumbe*

Unit 13 consists of approximately 81 ac (33 ha) of State (76 ac (31 ha)) and county (5 ac (2 ha)) owned lands in Miami-Dade County. The unit is within the historical range of the Miami tiger beetle, although we are not aware of any records of historical occupancy of the unit. This unit includes remaining pine rockland habitat in the Northern Biscayne Pinelands of the Miami Rock Ridge. This unit includes all the physical or biological features essential to the conservation of the species and is protected and actively managed to maintain healthy pine rockland habitat.

This unit is currently unoccupied by the Miami tiger beetle but is essential for the conservation of the species because it serves to protect habitat needed to recover the species, reestablish wild populations within the historical range of the species, and maintain populations throughout the historical distribution of the species in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should the Miami tiger beetle be extirpated from one of its current locations. Given this unit contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial

distribution falling within the range of the species, we are reasonably certain that the lands and habitat within this unit will contribute to the conservation of the Miami tiger beetle.

The Natural Areas Management Division of Miami-Dade County Parks, Recreation and Open Spaces Department conducts nonnative species control, prescribed fire, and mechanical vegetation treatments on lands owned by Miami-Dade County. The actions help improve habitat that could support the Miami tiger beetle.

All but 4 ac (1 ha) of Unit 13 overlaps with designated critical habitat for Bartram's scrub-hairstreak butterfly, Carter's small-flowered flax, and Florida brickell-bush. Additionally, approximately 62 ac (25 ha) or 77 percent of Unit 13 is enrolled in the NFC program.

#### *Unit 14: Richmond Pine Rocklands*

Unit 14 consists of approximately 1,455 ac (589 ha) in Miami-Dade County. Landownership in this unit is split among Federal (488 ac (198 ha)), county (844 ac (341 ha)), and private (123 ac (50 ha)). This unit is currently occupied by the Miami tiger beetle, which has been documented from four contiguous parcels within the Richmond Pine Rocklands: Zoo Miami Pine Rockland Preserve (Zoo Miami), Larry and Penny Thompson Park, U.S. Coast Guard, and University of Miami's Center for Southeastern Tropical Advanced Remote Sensing property (CSTARS). Miami tiger beetles within the four contiguous occupied parcels in the Richmond population are within close proximity to each other with connecting patches of habitat with few or no barriers between parcels. Given the contiguous habitat with few barriers to dispersal, frequent adult movement among individuals is likely, and the occupied Richmond parcels probably represent a single population (Knisley 2015b, p. 10).

The unit also includes areas of pine rockland habitat containing all of the physical and biological features essential to the conservation of the species that are adjacent to sites with documented occurrences. The complex, including these parcels, contains all of the essential features (physical or biological features)—including pine rockland habitat (of sufficient size) with open or sparsely vegetated sandy areas that allow for thermoregulation, foraging, egg-

laying, larval development, species dispersal, and population expansion, and natural or artificial disturbance regimes. The complex as a whole protects the occupied sites within the Richmond population, provides dispersal corridors for the Richmond population, provides potential habitat for population expansion, and supports prey-base populations. Being only one of two sites known to be currently occupied by the Miami tiger beetle, this complex is important to the Miami tiger beetle to ensure redundancy for the species and to contribute to the species' viability.

The physical or biological features in this unit may require additional special management considerations or protection to address threats of habitat loss and fragmentation, inadequate fire management, vegetation encroachment, collection, small population size, and sea level rise. In some cases, these threats are being addressed or coordinated with our partners and landowners to implement needed actions.

Approximately 776 ac (314 ha) or 53 percent of Unit 14 is enrolled in the NFC program. In addition, of the approximately 1,455 ac (589 ha) of critical habitat proposed for the Miami tiger beetle in Unit 14, about 937 ac (379 ha) overlap with designated critical habitat for Bartram's scrub-hairstreak butterfly, Florida leafwing butterfly, Carter's small-flowered flax, and Florida brickell-bush. Therefore, approximately 518 ac (210 ha) of proposed critical habitat in Unit 14 is unique to the Miami tiger beetle.

#### *Unit 15: Calderon Pineland*

Unit 15 consists of approximately 14 ac (6 ha) of county-owned lands in Miami-Dade County. The unit is within the historical range of the Miami tiger beetle, although we are not aware of any records of historical occupancy of the unit. This unit includes remaining pine rockland habitat in the Northern Biscayne Pinelands of the Miami Rock Ridge. This unit includes all the physical or biological features essential to the conservation of the species and is protected and actively managed to maintain healthy pine rockland habitat.

This unit is currently unoccupied by the Miami tiger beetle but is essential for the



conservation of the species because it serves to protect habitat needed to recover the species, reestablish wild populations within the historical range of the species, and maintain populations throughout the historical distribution of the species in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should the Miami tiger beetle be extirpated from one of its current locations. Given this unit contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial distribution falling within the range of the species, we are reasonably certain that the lands and habitat within this unit will contribute to the conservation of the Miami tiger beetle.

The Natural Areas Management Division of Miami-Dade County Parks, Recreation and Open Spaces Department conducts nonnative species control, prescribed fire, and mechanical vegetation treatments on lands owned by Miami-Dade County. The actions help improve habitat that could support the Miami tiger beetle.

The entirety of Unit 15 overlaps with designated critical habitat for Florida brickell-bush. Additionally, approximately 9 ac (4 ha) or 64 percent of Unit 15 is enrolled in the NFC program.

#### *Unit 16: Porter Pineland Preserve*

Unit 16 consists of approximately 7 ac (3 ha) of privately owned lands in Miami-Dade County. The unit is within the historical range of the Miami tiger beetle, although we are not aware of any records of historical occupancy of the unit. This unit includes remaining pine rockland habitat in the Northern Biscayne Pinelands of the Miami Rock Ridge. This unit includes all the physical or biological features essential to the conservation of the species and is protected and actively managed to maintain healthy pine rockland habitat.

This unit is currently unoccupied by the Miami tiger beetle but is essential for the conservation of the species because it serves to protect habitat needed to recover the species, reestablish wild populations within the historical range of the species, and maintain populations throughout the historical distribution of the species in Miami-Dade County. It also provides habitat for recovery in the case of stochastic events, should the Miami tiger beetle be extirpated

from one of its current locations. Given this unit contains essential habitat features (all of the physical or biological features), is protected and actively managed, and has an appropriate spatial distribution falling within the range of the species, we are reasonably certain that the lands and habitat within this unit will contribute to the conservation of the Miami tiger beetle.

The Audubon Society, with the help of volunteers and other conservation groups, conduct nonnative species control, prescribed fire, and mechanical vegetation treatments on this privately owned parcel. The actions help improve habitat that could support the Miami tiger beetle.

The entirety of Unit 16 overlaps with designated critical habitat for Carter's small-flowered flax and Florida brickell-bush. Additionally, approximately 6 ac (2 ha) or 86 percent of Unit 16 is enrolled in the NFC program.

## **Effects of Critical Habitat Designation**

### *Section 7 Consultation*

Section 7(a)(2) of the Act requires Federal agencies, including the Service, to ensure that any action they fund, authorize, or carry out is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of designated critical habitat of such species. In addition, section 7(a)(4) of the Act requires Federal agencies to confer with the Service on any agency action which is likely to jeopardize the continued existence of any species proposed to be listed under the Act or result in the destruction or adverse modification of proposed critical habitat.

We published a final rule revising the definition of destruction or adverse modification on August 27, 2019 (84 FR 44976). Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat as a whole for the conservation of a listed species.

If a Federal action may affect a listed species or its critical habitat, the responsible Federal agency (action agency) must enter into consultation with us. Examples of actions that are subject to the section 7 consultation process are actions on State, Tribal, local, or private

lands that require a Federal permit (such as a permit from the Corps under section 404 of the Clean Water Act (33 U.S.C. 1251 *et seq.*) or a permit from the Service under section 10 of the Act) or that involve some other Federal action (such as funding from the Federal Highway Administration, Federal Aviation Administration, or the Federal Emergency Management Agency). Federal actions not affecting listed species or critical habitat—and actions on State, Tribal, local, or private lands that are not federally funded, authorized, or carried out by a Federal agency—do not require section 7 consultation.

Compliance with the requirements of section 7(a)(2) is documented through our issuance of:

(1) A concurrence letter for Federal actions that may affect, but are not likely to adversely affect, listed species or critical habitat; or

(2) A biological opinion for Federal actions that may affect, and are likely to adversely affect, listed species or critical habitat.

When we issue a biological opinion concluding that a project is likely to jeopardize the continued existence of a listed species and/or destroy or adversely modify critical habitat, we provide reasonable and prudent alternatives to the project, if any are identifiable, that would avoid the likelihood of jeopardy and/or destruction or adverse modification of critical habitat. We define “reasonable and prudent alternatives” (at 50 CFR 402.02) as alternative actions identified during consultation that:

- (1) Can be implemented in a manner consistent with the intended purpose of the action,
- (2) Can be implemented consistent with the scope of the Federal agency’s legal authority and jurisdiction,
- (3) Are economically and technologically feasible, and
- (4) Would, in the Service Director’s opinion, avoid the likelihood of jeopardizing the continued existence of the listed species and/or avoid the likelihood of destroying or adversely modifying critical habitat.

Reasonable and prudent alternatives can vary from slight project modifications to extensive redesign or relocation of the project. Costs associated with implementing a reasonable and prudent alternative are similarly variable.

Regulations at 50 CFR 402.16 set forth requirements for Federal agencies to reinitiate formal consultation on previously reviewed actions. These requirements apply when the Federal agency has retained discretionary involvement or control over the action (or the agency's discretionary involvement or control is authorized by law) and, if subsequent to the previous consultation: (1) if the amount or extent of taking specified in the incidental take statement is exceeded; (2) if new information reveals effects of the action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) if the identified action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not considered in the biological opinion; or (4) if a new species is listed or critical habitat designated that may be affected by the identified action. In such situations, Federal agencies sometimes may need to request reinitiation of consultation with us, but the regulations also specify some exceptions to the requirement to reinitiate consultation on specific land management plans after subsequently listing a new species or designating new critical habitat. See the regulations for a description of those exceptions.

#### *Application of the "Destruction or Adverse Modification" Standard*

The key factor related to the destruction or adverse modification determination is whether implementation of the proposed Federal action directly or indirectly alters the designated critical habitat in a way that appreciably diminishes the value of the critical habitat as a whole for the conservation of the listed species. As discussed above, the role of critical habitat is to support physical or biological features essential to the conservation of a listed species and provide for the conservation of the species.

Section 4(b)(8) of the Act requires us to briefly evaluate and describe, in any proposed or final regulation that designates critical habitat, activities involving a Federal action that may

violate section 7(a)(2) of the Act by destroying or adversely modifying such habitat, or that may be affected by such designation.

Activities that the Service may, during a consultation under section 7(a)(2) of the Act, consider likely to destroy or adversely modify critical habitat, or activities that may affect critical habitat, when carried out, funded, or authorized by a Federal agency, should result in consultation for the Miami tiger beetle. These activities include, but are not limited to:

(1) Actions that would significantly alter the hydrology or substrate, such as ditching or filling. Such activities may include, but are not limited to, road construction or maintenance, and residential, commercial, or recreational development.

(2) Actions that would significantly alter vegetation structure or composition, such as preventing the ability to conduct prescribed burns, residential and commercial development, and recreational facilities and trails.

(3) Actions that would introduce chemical pesticides into the pine rockland ecosystem in a manner that impacts the Miami tiger beetle. Such activities may include but are not limited to mosquito control and agricultural pesticide applications.

(4) Actions that would introduce nonnative species that would significantly alter vegetation structure or composition or the life history of the Miami tiger beetle. Such activities may include, but are not limited to, release of parasitic or predator species (flies or wasps) for use in agriculture-based biological control programs.

## **Exemptions**

### *Application of Section 4(a)(3) of the Act*

Section 4(a)(3)(B)(i) of the Act (16 U.S.C. 1533(a)(3)(B)(i)) provides that: “The Secretary shall not designate as critical habitat any lands or other geographical areas owned or controlled by the Department of Defense (DoD), or designated for its use, that are subject to an integrated natural resources management plan (INRMP) prepared under section 101 of the Sikes

Act (16 U.S.C. 670a), if the Secretary determines in writing that such plan provides a benefit to the species for which critical habitat is proposed for designation.” No DoD lands with a completed INRMP are within the proposed critical habitat designation.

We are not aware of any DoD lands within the boundaries of the proposed designation or that would be directly affected by the designation if finalized as proposed. We have determined that the Corps, a branch of the DoD, retains ownership over a 121-ac (49-ha) parcel proposed for designation of critical habitat in Unit 14; of this parcel, 85 ac (34 ha) are forested but not managed for preservation of natural resources. These Corps lands are not considered a military installation under the Sikes Act subject to an INRMP, so they do not meet the standards of section 4(a)(3)(B)(i) of the Act. As a result, we are not exempting any lands from this designation of critical habitat for the Miami tiger beetle pursuant to section 4(a)(3)(B)(i) of the Act.

#### **Consideration of Impacts Under Section 4(b)(2) of the Act**

Section 4(b)(2) of the Act states that the Secretary shall designate and make revisions to critical habitat on the basis of the best available scientific data after taking into consideration the economic impact, national security impact, and any other relevant impact of specifying any particular area as critical habitat. The Secretary may exclude an area from critical habitat if we determine that the benefits of such exclusion outweigh the benefits of specifying such area as part of the critical habitat, unless we determine, based on the best scientific data available, that the failure to designate such area as critical habitat will result in the extinction of the species. In making that determination, the statute on its face, as well as the legislative history, are clear that the Secretary has broad discretion regarding which factor(s) to use and how much weight to give to any factor. Under section 4(b)(2) of the Act, we may exclude an area from designated critical habitat based on economic impacts, impacts on national security, or any other relevant impacts. In considering whether to exclude a particular area from the designation, we identify the benefits of including the area in the designation, identify the benefits of excluding the area from the

designation, and evaluate whether the benefits of exclusion outweigh the benefits of inclusion. If the analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, the Secretary may exercise discretion to exclude the area only if such exclusion would not result in the extinction of the species. We have not proposed any areas for exclusion from critical habitat for the Miami tiger beetle. However, the final decision on whether to exclude any areas will be based on the best scientific data available at the time of the final designation, including information obtained during the comment period and information about the economic impact of designation. Accordingly, we have prepared a draft economic analysis concerning the proposed critical habitat designation, which is available for review and comment (see **ADDRESSES**). We describe below the process that we undertook for taking into consideration each category of impacts and our analyses of the relevant impacts.

#### *Consideration of Economic Impacts*

Section 4(b)(2) of the Act and its implementing regulations require that we consider the economic impact that may result from a designation of critical habitat. To assess the probable economic impacts of a designation, we must first evaluate specific land uses or activities and projects that may occur in the area of the critical habitat. We then must evaluate the impacts that a specific critical habitat designation may have on restricting or modifying specific land uses or activities for the benefit of the species and its habitat within the areas proposed. We then identify which conservation efforts may be the result of the species being listed under the Act versus those attributed solely to the designation of critical habitat for this particular species. The probable economic impact of a proposed critical habitat designation is analyzed by comparing scenarios both “with critical habitat” and “without critical habitat.”

The “without critical habitat” scenario represents the baseline for the analysis, which includes the existing regulatory and socio-economic burden imposed on landowners, managers, or other resource users potentially affected by the designation of critical habitat (e.g., under the Federal listing as well as other Federal, State, and local regulations). Therefore, the baseline

represents the costs of all efforts attributable to the listing of the species under the Act (i.e., conservation of the species and its habitat incurred regardless of whether critical habitat is designated). The “with critical habitat” scenario describes the incremental impacts associated specifically with the designation of critical habitat for the species. The incremental conservation efforts and associated impacts would not be expected without the designation of critical habitat for the species. In other words, the incremental costs are those attributable solely to the designation of critical habitat, above and beyond the baseline costs. These are the costs we use when evaluating the benefits of inclusion and exclusion of particular areas from the final designation of critical habitat should we choose to conduct a discretionary 4(b)(2) exclusion analysis.

For this particular designation, we developed an incremental effects memorandum (IEM) considering the probable incremental economic impacts that may result from this proposed designation of critical habitat. The information contained in our IEM was then used to develop a screening analysis of the probable effects of the designation of critical habitat for the Miami tiger beetle (IEc 2021, entire). We began by conducting a screening analysis of the proposed designation of critical habitat in order to focus our analysis on the key factors that are likely to result in incremental economic impacts. The purpose of the screening analysis is to filter out the geographic areas in which the critical habitat designation is unlikely to result in probable incremental economic impacts. In particular, the screening analysis considers baseline costs (i.e., absent critical habitat designation) and includes any probable incremental economic impacts where land and water use may already be subject to conservation plans, land management plans, best management practices, or regulations that protect the habitat area as a result of the Federal listing status of the species.

If the proposed critical habitat designation contains any unoccupied units, the screening analysis filters out particular areas of critical habitat that are already subject to such protections and are, therefore, unlikely to incur incremental economic impacts. Ultimately, the screening



analysis allows us to focus our analysis on evaluating the specific areas or sectors that may incur probable incremental economic impacts as a result of the designation. If the proposed critical habitat designation contains any unoccupied units, the screening analysis assesses whether units are unoccupied because they require additional management or conservation efforts that may incur incremental economic impacts. This screening analysis combined with the information contained in our IEM constitute what we consider to be our draft economic analysis of the proposed critical habitat designation for the Miami tiger beetle and is summarized in the narrative below.

Executive Orders (E.O.) 12866 and 13563 direct Federal agencies to assess the costs and benefits of available regulatory alternatives in quantitative (to the extent feasible) and qualitative terms. Consistent with the E.O. regulatory analysis requirements, our effects analysis under the Act may take into consideration impacts to both directly and indirectly affected entities, where practicable and reasonable. If sufficient data are available, we assess to the extent practicable the probable impacts to both directly and indirectly affected entities. As part of our screening analysis, we considered the types of economic activities that are likely to occur within the areas likely affected by the critical habitat designation.

In our evaluation of the probable incremental economic impacts that may result from the proposed designation of critical habitat for the Miami tiger beetle, first we identified, in the IEM dated April 28, 2021, probable incremental economic impacts associated with the following categories of activities: (1) Federal lands management (U.S. Coast Guard, Corps, FBP, and NOAA); (2) roadway and bridge construction; (3) agriculture; (4) dredging; (5) storage and distribution of chemical pollutants; (6) commercial or residential development; and (7) recreation (including construction of recreation infrastructure). We considered each industry or category individually. Additionally, we considered whether their activities have any Federal involvement. Critical habitat designation generally will not affect activities that do not have any Federal involvement; under the Act, designation of critical habitat only affects activities conducted,

funded, permitted, or authorized by Federal agencies. In areas where the Miami tiger beetle is present, Federal agencies already are required to consult with the Service under section 7 of the Act on activities they fund, permit, or implement that may affect the species. If we finalize this proposed critical habitat designation, our consultation would include an evaluation of measures to avoid the destruction or adverse modification of critical habitat.

In our IEM, we attempted to clarify the distinction between the effects that will result from the species being listed and those attributable to the critical habitat designation (i.e., difference between the jeopardy and adverse modification standards) for the Miami tiger beetle's critical habitat. Because the designation of critical habitat for the Miami tiger beetle is being proposed several years following the listing of the species, data, such as from consultation history, is available to help us discern which conservation efforts are attributable to the species being listed and those which will result solely from the designation of critical habitat. The following specific circumstances help to inform our evaluation: (1) The essential physical or biological features identified for critical habitat are the same features essential for the life requisites of the species and (2) any actions that would result in sufficient harm or harassment to constitute jeopardy to the Miami tiger beetle would also likely adversely affect the essential physical or biological features of critical habitat. The IEM outlines our rationale concerning this limited distinction between protections or economic impacts associated with listing and incremental impacts of the designation of critical habitat for this species. This evaluation of the incremental effects has been used as the basis to evaluate the probable incremental economic impacts of this proposed designation of critical habitat.

The proposed critical habitat designation for the Miami tiger beetle totals approximately 1,977 ac (800 ha) in 16 units in Miami-Dade County, Florida. Two of the 16 units are currently occupied by the Miami tiger beetle; the remaining 14 units are within the beetle's historical range but were not occupied at the time the species was listed in 2016 and are not known to be currently occupied. As previously stated, the 14 unoccupied critical habitat units encompass

approximately 405 ac (164 ha) or 20 percent of proposed critical habitat for the Miami tiger beetle, of which only 17 ac (7 ha) or 4 percent are not currently designated as critical habitat for other federally listed species. Tables 1 through 3, above, set forth specific information concerning each unit, including occupancy, land ownership, and extent of overlap with existing Federal critical habitat (see **Proposed Critical Habitat Designation**).

Because the majority (80 percent) of the area designated is occupied, most actions that may affect the species or its habitat would also affect designated critical habitat, and it is unlikely that any additional conservation efforts would be recommended to address the adverse modification standard over and above those recommended as necessary to avoid jeopardizing the continued existence of the Miami tiger beetle. Therefore, only administrative costs are expected in approximately 80 percent of the proposed critical habitat designation. While the analysis for adverse modification of critical habitat will require time and resources by both the Federal action agency and the Service, it is believed that, in most circumstances, these costs would predominantly be administrative in nature and would not be significant.

The remaining designated area is unoccupied and mostly (96 percent of the unoccupied area) overlaps with existing designated critical habitat for other pine rockland habitat species, including Carter's small-flowered flax, Florida brickell-bush, Bartram's scrub hairstreak butterfly, and the Florida leafwing butterfly. As a result, consultations for other listed species and critical habitats are likely to have already resulted in protections absent the critical habitat designation for the Miami tiger beetle, and recommendations for those species are anticipated to be sufficient to protect the Miami tiger beetle critical habitat. Further, any consultation requirements for listed species and resulting costs would be at least partially split among each overlapped species with not one species being the sole source of the entire costs. Accordingly, in these unoccupied areas, any conservation efforts or associated probable impacts would be considered incremental effects attributed to the critical habitat designation.

The probable incremental economic impacts of the Miami tiger beetle critical habitat

designation are expected to be limited to additional administrative effort as well as minor costs of conservation efforts resulting from a small number of future section 7 consultations. This is due to two factors: (1) A large portion of proposed critical habitat is considered to be occupied by the species (80 percent), and incremental economic impacts of critical habitat designation, other than administrative costs, are unlikely; and (2) in proposed areas that are not occupied by the Miami tiger beetle (20 percent), nearly all is designated critical habitat for other pine rockland species and the designation is not likely to result in additional or different project modifications from those that would already be anticipated absent the Miami tiger beetle designation. Because of the relatively small size of the critical habitat designation, the volume of lands that are State, county, or privately owned, and the substantial amount of lands that are already being managed for conservation, the numbers of section 7 consultations expected annually are modest (approximately 2 formal, 12 informal, and 14 technical assistance efforts annually across the designation).

Some potential private property value effects are possible due to public perception of impacts to private lands. The designation of critical habitat may cause some developers or landowners to perceive that private lands will be subject to use restrictions or litigation from third parties, resulting in costs. However, less than seven percent of the proposed critical habitat designation is privately owned land, leading to nominal incremental costs arising from changes in public perception of lands included in the designation.

Critical habitat designation for the Miami tiger beetle is unlikely to generate costs or benefits exceeding \$100 million in a single year. Therefore, this rule is unlikely to meet the threshold for an economically significant rule, with regard to costs, under E.O. 12866. In fact, the total annual incremental costs of critical habitat designation for the Miami tiger beetle is anticipated to be less than \$48,000 per year, and economic benefits are also anticipated to be small.

As we stated earlier, we are soliciting data and comments from the public on the draft

economic analysis, as well as on all aspects of the proposed rule and our amended required determinations. During the development of a final designation, we will consider the information presented in the draft economic analysis and any additional information on economic impacts we receive during the public comment period to determine whether any specific areas should be excluded from the final critical habitat designation under authority of section 4(b)(2) and our implementing regulations at 50 CFR 17.90. If we receive credible information regarding the existence of a meaningful economic or other relevant impact supporting a benefit of exclusion, we will conduct an exclusion analysis for the relevant area or areas. We may also exercise the discretion to evaluate any other particular areas for possible exclusion. Furthermore, when we conduct an exclusion analysis based on impacts identified by experts in, or sources with firsthand knowledge about, impacts that are outside the scope of the Service's expertise, we will give weight to those impacts consistent with the expert or firsthand information unless we have rebutting information. We may exclude an area from critical habitat if we determine that the benefits of excluding the area outweigh the benefits of including the area, provided the exclusion will not result in the extinction of this species.

#### *Consideration of National Security Impacts*

Section 4(a)(3)(B)(i) of the Act may not cover all DoD lands or areas that pose potential national-security concerns (e.g., a DoD installation that is in the process of revising its INRMP for a newly listed species or a species previously not covered). If a particular area is not covered under section 4(a)(3)(B)(i), then national-security or homeland-security concerns are not a factor in the process of determining what areas meet the definition of "critical habitat." However, the Service must still consider impacts on national security, including homeland security, on those lands or areas not covered by section 4(a)(3)(B)(i), because section 4(b)(2) requires the Service to consider those impacts whenever it designates critical habitat. Accordingly, if DoD, Department of Homeland Security (DHS), or another Federal agency has requested exclusion based on an assertion of national-security or homeland security concerns, or we have otherwise

identified national security or homeland-security impacts from designating particular areas as critical habitat, we generally have reason to consider excluding those areas.

However, we cannot automatically exclude requested areas. When DoD, DHS, or another Federal agency requests exclusion from critical habitat on the basis of national-security or homeland-security impacts, we must conduct an exclusion analysis if the Federal requester provides credible information, including a reasonably specific justification of an incremental impact on national security that would result from the designation of that specific area as critical habitat. That justification could include demonstration of probable impacts, such as impacts to ongoing border-security patrols and surveillance activities, or a delay in training or facility construction, as a result of compliance with section 7(a)(2) of the Act. If the agency requesting the exclusion does not provide us with a reasonably specific justification, we will contact the agency to recommend that it provide a specific justification or clarification of its concerns relative to the probable incremental impact that could result from the designation. If we conduct an exclusion analysis because the agency provides a reasonably specific justification or because we decide to exercise the discretion to conduct an exclusion analysis, we will defer to the expert judgment of DoD, DHS, or another Federal agency as to: (1) Whether activities on its lands or waters, or its activities on other lands or waters, have national-security or homeland-security implications; (2) the importance of those implications; and (3) the degree to which the cited implications would be adversely affected in the absence of an exclusion. In that circumstance, in conducting a discretionary section 4(b)(2) exclusion analysis, we will give great weight to national-security and homeland-security concerns in analyzing the benefits of exclusion.

#### *DHS Land Parcel*

We have determined that some lands within Unit 14 of the proposed designation of critical habitat for the Miami tiger beetle are owned, managed, or used by the U.S. Coast Guard, which is part of the DHS.

As discussed in the Richmond Pine Rocklands (Unit 14) description above, the U.S.

Coast Guard property is separated into two main areas: the COMMSTA Miami and the CEU. The COMMSTA houses transmitting and receiving antennas. The CEU plans and executes projects at regional shore facilities, such as construction and post-disaster assessments.

The U.S. Coast Guard parcel contains approximately 100 ac (40 ha) of standing pine rocklands. The remainder of the site, outside of the developed areas, is made up of scraped pine rocklands that are mowed three to four times per year for maintenance of a communications antenna field. While disturbed, this scraped area maintains sand substrate and many native pine rockland species, including documented occurrences of the Miami tiger beetle. The U.S. Coast Guard parcel has a draft management plan that includes management of pine rockland habitats, including vegetation control and prescribed fire and protection of lands from further development or degradation. In addition, the standing pine rockland area is partially managed through an active recovery grant to the Institute for Regional Conservation. Under this grant, up to 39 ac (16 ha) of standing pine rocklands will undergo invasive vegetation control.

Based on a review of the specific mission of the U.S. Coast Guard facility in conjunction with the measures and efforts set forth in the draft management plan to preserve pine rockland habitat and protect sensitive and listed species, we have made a preliminary determination that it is unlikely that the critical habitat, if finalized as proposed, would negatively impact the facility or its operations. As a result, we do not anticipate any impact on national security. However, if through the public comment period we receive credible information regarding impacts on national security or homeland security from designating particular areas as critical habitat, then as part of developing the final designation of critical habitat, we will conduct a discretionary exclusion analysis to determine whether to exclude those areas under authority of section 4(b)(2) and our implementing regulations at 50 CFR 17.90.

#### *DoD Land Parcel*

As discussed above, we have determined that the Corps, a branch of the DoD, retains ownership over a 121-ac (49-ha)-parcel in Unit 14 of the proposed designation of critical habitat

for the Miami tiger beetle. Over 85 ac (34 ha) of this parcel are forested but not managed for preservation of natural resources. The Corps does not have any specific management plan for the Miami tiger beetle or its habitat covering these lands. Activities conducted on this site are unknown, but we do not anticipate any impact on national security. However, if through the public comment period we receive credible information regarding impacts on national security or homeland security from designating particular areas as critical habitat, then as part of developing the final designation of critical habitat, we will conduct a discretionary exclusion analysis to determine whether to exclude those areas under authority of section 4(b)(2) and our implementing regulations at 50 CFR 17.90.

#### *Consideration of Other Relevant Impacts*

Under section 4(b)(2) of the Act, we consider any other relevant impacts, in addition to economic impacts and impacts on national security discussed above. Other relevant impacts may include, but are not limited to, impacts to Tribes, States, local governments, public health and safety, community interests, the environment (such as increased risk of wildfire or pest and invasive species management), Federal lands, and conservation plans, agreements, or partnerships. To identify other relevant impacts that may affect the exclusion analysis, we consider a number of factors, including whether there are permitted conservation plans covering the species in the area—such as HCPs, safe harbor agreements (SHAs), or candidate conservation agreements with assurances (CCAAs)—or whether there are non-permitted conservation agreements and partnerships that may be impaired by designation of, or exclusion from, critical habitat. In addition, we look at whether Tribal conservation plans or partnerships, Tribal resources, or government-to-government relationships of the United States with Tribal entities may be affected by the designation. We also consider any State, local, public-health, community-interest, environmental, or social impacts that might occur because of the designation.



When analyzing other relevant impacts of including a particular area in a designation of critical habitat, we weigh those impacts relative to the conservation value of the particular area. To determine the conservation value of designating a particular area, we consider a number of factors, including, but not limited to, the additional regulatory benefits that the area would receive due to the protection from destruction or adverse modification as a result of actions with a Federal nexus, the educational benefits of mapping essential habitat for recovery of the listed species, and any benefits that may result from a designation due to State or Federal laws that may apply to critical habitat.

In the case of Miami tiger beetle, the benefits of critical habitat include public awareness of the presence of Miami tiger beetle and the importance of habitat protection, and, where a Federal nexus exists, increased habitat protection for Miami tiger beetle due to protection from destruction or adverse modification of critical habitat. Continued implementation of an ongoing management plan that provides conservation equal to or more than the protections that result from a critical habitat designation would reduce those benefits of including that specific area in the critical habitat designation.

We evaluate the existence of a conservation plan when considering the benefits of inclusion. We consider a variety of factors, including, but not limited to, whether the plan is finalized; how it provides for the conservation of the essential physical or biological features; whether there is a reasonable expectation that the conservation management strategies and actions contained in a management plan will be implemented into the future; whether the conservation strategies in the plan are likely to be effective; and whether the plan contains a monitoring program or adaptive management to ensure that the conservation measures are effective and can be adapted in the future in response to new information.

After identifying the benefits of inclusion and the benefits of exclusion, we carefully weigh the two sides to evaluate whether the benefits of exclusion outweigh those of inclusion. If our analysis indicates that the benefits of exclusion outweigh the benefits of inclusion, we then

determine whether exclusion would result in extinction of the species. If exclusion of an area from critical habitat will result in extinction, we will not exclude it from the designation.

#### Private or Other Non-Federal Conservation Plans or Agreements and Partnerships, in General

HCPs for incidental take permits under section 10(a)(1)(B) of the Act provide for partnerships with non-Federal entities to minimize and mitigate impacts to listed species and their habitat. In some cases, HCP permittees agree to do more for the conservation of the species and their habitats on private lands than designation of critical habitat would provide alone. We place great value on the partnerships that are developed during the preparation and implementation of HCPs.

CCAAs and SHAs are voluntary agreements designed to conserve candidate and listed species, respectively, on non-Federal lands. In exchange for actions that contribute to the conservation of species on non-Federal lands, participating property owners are covered by an “enhancement of survival” permit under section 10(a)(1)(A) of the Act, which authorizes incidental take of the covered species that may result from implementation of conservation actions, specific land uses, and, in the case of SHAs, the option to return to a baseline condition under the agreements. The Service also provides enrollees assurances that we will not impose further land-, water-, or resource-use restrictions, or require additional commitments of land, water, or finances, beyond those agreed to in the agreements.

When we undertake a discretionary section 4(b)(2) exclusion analysis based on permitted conservation plans such as CCAAs, SHAs, and HCPs, we consider the following three factors:

- (i) Whether the permittee is properly implementing the conservation plan or agreement;
- (ii) Whether the species for which critical habitat is being designated is a covered species in the conservation plan or agreement; and
- (iii) Whether the conservation plan or agreement specifically addresses the habitat of the species for which critical habitat is being designated and meets the conservation needs of the species in the planning area.

The proposed critical habitat designation includes areas that are covered by the following permitted plan providing for the conservation of Miami tiger beetle: Coral Reef Commons Habitat Conservation Plan.

*Coral Reef Commons Habitat Conservation Plan*

In preparing this proposal, we have determined that lands associated with the Coral Reef Commons HCP within the Richmond Pine Rocklands (Unit 14) are included within the boundaries of the proposed critical habitat.

As discussed in the Richmond Pine Rocklands (Unit 14) description above, Coral Reef Commons is a mixed-use community, which consists of 900 apartments, retail stores, restaurants, and parking. In 2017, an HCP and associated permit under section 10 of the Act was developed and issued for the Coral Reef Commons development. As part of the HCP and permit, an approximately 51-ac (21-ha) onsite preserve (same as the area for proposed critical habitat designation) was established under a conservation encumbrance that will be managed in perpetuity for pine rockland habitat and sensitive and listed species, including the Miami tiger beetle. In addition, an additional approximately 51 ac (21 ha) of the CSTARS site (discussed above) is an offsite mitigation area for Coral Reef Commons. Both the onsite preserve and the offsite mitigation area are being managed to maintain healthy pine rockland habitat through the use of invasive, exotic plant management, mechanical treatment, and prescribed fire, addressing both the habitat and conservation needs of the species. Since initiating the Coral Reef Commons HCP, pine rockland restoration efforts have been conducted within all of the management units in both the onsite preserve and the offsite mitigation area. A second round of prescribed fire began in February 2021. Currently, the onsite preserve meets or exceeds the success criteria described for proper implementation of the HCP.

Critical habitat within Unit 14 that is associated with the Coral Reef Commons HCP is limited to the onsite preserve and offsite mitigation area. Based on our review of the HCP and proposed critical habitat for the Miami tiger beetle, we do not anticipate requesting any

additional conservation measures for the species beyond those that are currently in place. The Coral Reef Commons HCP covers the Miami tiger beetle; addresses the specific habitat of the species and meets the conservation needs of the species; and is currently being implemented properly. Therefore, at this time, we are considering excluding those specific lands associated with the Coral Reef Commons HCP that are in the preserve and offsite mitigation area from the final designation of critical habitat for the Miami tiger beetle. However, we will more thoroughly review the HCP, its implementation of the conservation measures for the Miami tiger beetle and its habitat therein, and public comment on this issue prior to finalizing critical habitat, and if appropriate, exclude from critical habitat for the Miami tiger beetle those lands associated with the Coral Reef Commons HCP that are in the preserve and offsite mitigation area.

We have further determined that there are no additional HCPs or other management plans for the Miami tiger beetle within the proposed critical habitat designation.

#### *Tribal Lands*

Several Executive Orders, Secretarial Orders, and policies concern working with Tribes. These guidance documents generally confirm our trust responsibilities to Tribes, recognize that Tribes have sovereign authority to control Tribal lands, emphasize the importance of developing partnerships with Tribal governments, and direct the Service to consult with Tribes on a government-to-government basis. There are no Tribal lands within the designated critical habitat for Miami tiger beetle.

During the development of a final designation, we will consider any additional information received through the public comment period regarding other relevant impacts to determine whether any specific areas should be excluded from the final critical habitat designation under authority of section 4(b)(2) and our implementing regulations at 50 CFR 17.90.

### **Required Determinations**

#### *Clarity of the Rule*

We are required by Executive Orders 12866 and 12988 and by the Presidential Memorandum of June 1, 1998, to write all rules in plain language. This means that each rule we publish must:

- (1) Be logically organized;
- (2) Use the active voice to address readers directly;
- (3) Use clear language rather than jargon;
- (4) Be divided into short sections and sentences; and
- (5) Use lists and tables wherever possible.

If you feel that we have not met these requirements, send us comments by one of the methods listed in **ADDRESSES**. To better help us revise the rule, your comments should be as specific as possible. For example, you should tell us the numbers of the sections or paragraphs that are unclearly written, which sections or sentences are too long, the sections where you feel lists or tables would be useful, etc.

*Regulatory Planning and Review (Executive Orders 12866 and 13563)*

Executive Order 12866 provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget will review all significant rules. OIRA has determined that this rule is not significant.

Executive Order 13563 reaffirms the principles of E.O. 12866 while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. The executive order directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives. E.O. 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this proposed rule in a manner consistent with these requirements.

*Regulatory Flexibility Act (5 U.S.C. 601 et seq.)*

Under the Regulatory Flexibility Act (RFA; 5 U.S.C. 601 *et seq.*), as amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA; 5 U.S.C. 801 *et seq.*), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effects of the rule on small entities (*i.e.*, small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of the agency certifies the rule will not have a significant economic impact on a substantial number of small entities. The SBREFA amended the RFA to require Federal agencies to provide a certification statement of the factual basis for certifying that the rule will not have a significant economic impact on a substantial number of small entities.

According to the Small Business Administration, small entities include small organizations such as independent nonprofit organizations; small governmental jurisdictions, including school boards and city and town governments that serve fewer than 50,000 residents; and small businesses (13 CFR 121.201). Small businesses include manufacturing and mining concerns with fewer than 500 employees, wholesale trade entities with fewer than 100 employees, retail and service businesses with less than \$5 million in annual sales, general and heavy construction businesses with less than \$27.5 million in annual business, special trade contractors doing less than \$11.5 million in annual business, and agricultural businesses with annual sales less than \$750,000. To determine if potential economic impacts to these small entities are significant, we considered the types of activities that might trigger regulatory impacts under this designation as well as types of project modifications that may result. In general, the term “significant economic impact” is meant to apply to a typical small business firm’s business operations.

Under the RFA, as amended, and as understood in light of recent court decisions, Federal agencies are required to evaluate the potential incremental impacts of rulemaking only on those

entities directly regulated by the rulemaking itself; in other words, the RFA does not require agencies to evaluate the potential impacts to indirectly regulated entities. The regulatory mechanism through which critical habitat protections are realized is section 7 of the Act, which requires Federal agencies, in consultation with the Service, to ensure that any action authorized, funded, or carried out by the agency is not likely to destroy or adversely modify critical habitat. Therefore, under section 7, only Federal action agencies are directly subject to the specific regulatory requirement (avoiding destruction and adverse modification) imposed by critical habitat designation. Consequently, it is our position that only Federal action agencies would be directly regulated if we adopt the proposed critical habitat designation. The RFA does not require evaluation of the potential impacts to entities not directly regulated. Moreover, Federal agencies are not small entities. Therefore, because no small entities would be directly regulated by this rulemaking, the Service certifies that, if made final as proposed, the proposed critical habitat designation will not have a significant economic impact on a substantial number of small entities.

In summary, we have considered whether the proposed designation would result in a significant economic impact on a substantial number of small entities. For the above reasons and based on currently available information, we certify that, if made final, the proposed critical habitat designation would not have a significant economic impact on a substantial number of small business entities. Therefore, an initial regulatory flexibility analysis is not required.

#### *Energy Supply, Distribution, or Use—Executive Order 13211*

Executive Order 13211 (Actions Concerning Regulations That Significantly Affect Energy Supply, Distribution, or Use) requires agencies to prepare Statements of Energy Effects when undertaking certain actions. In our economic analysis, we did not find that the designation of this proposed critical habitat will significantly affect energy supplies, distribution, or use. We do not foresee any energy development projects, supply distribution or use that may affect the proposed critical habitat units for the Miami tiger beetle. Further, in our evaluation of potential

economic impacts, we did not find that this proposed critical habitat designation would significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action, and no Statement of Energy Effects is required.

*Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.)*

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 *et seq.*), we make the following finding:

(1) This proposed rule would not produce a Federal mandate. In general, a Federal mandate is a provision in legislation, statute, or regulation that would impose an enforceable duty upon State, local, or Tribal governments, or the private sector, and includes both “Federal intergovernmental mandates” and “Federal private sector mandates.” These terms are defined in 2 U.S.C. 658(5)–(7). “Federal intergovernmental mandate” includes a regulation that “would impose an enforceable duty upon State, local, or Tribal governments” with two exceptions. It excludes “a condition of Federal assistance.” It also excludes “a duty arising from participation in a voluntary Federal program,” unless the regulation “relates to a then-existing Federal program under which \$500,000,000 or more is provided annually to State, local, and Tribal governments under entitlement authority,” if the provision would “increase the stringency of conditions of assistance” or “place caps upon, or otherwise decrease, the Federal Government’s responsibility to provide funding,” and the State, local, or Tribal governments “lack authority” to adjust accordingly. At the time of enactment, these entitlement programs were: Medicaid; Aid to Families with Dependent Children work programs; Child Nutrition; Food Stamps; Social Services Block Grants; Vocational Rehabilitation State Grants; Foster Care, Adoption Assistance, and Independent Living; Family Support Welfare Services; and Child Support Enforcement. “Federal private sector mandate” includes a regulation that “would impose an enforceable duty upon the private sector, except (i) a condition of Federal assistance or (ii) a duty arising from participation in a voluntary Federal program.”

The designation of critical habitat does not impose a legally binding duty on non-Federal



Government entities or private parties. Under the Act, the only regulatory effect is that Federal agencies must ensure that their actions do not destroy or adversely modify critical habitat under section 7. While non-Federal entities that receive Federal funding, assistance, or permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency. Furthermore, to the extent that non-Federal entities are indirectly impacted because they receive Federal assistance or participate in a voluntary Federal aid program, the Unfunded Mandates Reform Act would not apply, nor would critical habitat shift the costs of the large entitlement programs listed above onto State governments.

(2) We do not believe that this rule will significantly or uniquely affect small governments because the government lands being proposed for critical habitat designation are owned by the Federal Government, including the U.S. Coast Guard (DHS), U.S. Army Corps of Engineers (DoD), NOAA, and FBP; or are State or local governments such as the State of Florida, and Miami-Dade County. None of these government entities fit the definition of “small governmental jurisdiction.” Therefore, a Small Government Agency Plan is not required.

#### *Takings—Executive Order 12630*

In accordance with E.O. 12630 (Government Actions and Interference with Constitutionally Protected Private Property Rights), we have analyzed the potential takings implications of designating critical habitat for the Miami tiger beetle in a takings implications assessment. The Act does not authorize the Service to regulate private actions on private lands or confiscate private property as a result of critical habitat designation. Designation of critical habitat does not affect land ownership, or establish any closures or restrictions on use of or access to the designated areas. Furthermore, the designation of critical habitat does not affect landowner actions that do not require Federal funding or permits, nor does it preclude development of habitat conservation programs or issuance of incidental take permits to permit

actions that do require Federal funding or permits to go forward. However, Federal agencies are prohibited from carrying out, funding, or authorizing actions that would destroy or adversely modify critical habitat. A takings implications assessment has been completed for the proposed designation of critical habitat for the Miami tiger beetle and concludes that, if adopted, this designation of critical habitat does not pose significant takings implications for lands within or affected by the designation.

*Federalism—Executive Order 13132*

In accordance with E.O. 13132 (Federalism), this proposed rule does not have significant Federalism effects. A federalism summary impact statement is not required. In keeping with Department of the Interior and Department of Commerce policy, we requested information from, and coordinated development of this proposed critical habitat designation with, appropriate State resource agencies. From a federalism perspective, the designation of critical habitat directly affects only the responsibilities of Federal agencies. The Act imposes no other duties with respect to critical habitat, either for States and local governments, or for anyone else. As a result, the proposed rule does not have substantial direct effects either on the States, or on the relationship between the national government and the States, or on the distribution of powers and responsibilities among the various levels of government. The proposed designation may have some benefit to these governments because the areas that contain the features essential to the conservation of the species are more clearly defined, and the physical or biological features of the habitat necessary for the conservation of the species are specifically identified. This information does not alter where and what federally sponsored activities may occur. However, it may assist State and local governments in long-range planning because they no longer have to wait for case-by-case section 7 consultations to occur.

Where State and local governments require approval or authorization from a Federal agency for actions that may affect critical habitat, consultation under section 7(a)(2) of the Act would be required. While non-Federal entities that receive Federal funding, assistance, or

permits, or that otherwise require approval or authorization from a Federal agency for an action, may be indirectly impacted by the designation of critical habitat, the legally binding duty to avoid destruction or adverse modification of critical habitat rests squarely on the Federal agency.

*Civil Justice Reform—Executive Order 12988*

In accordance with Executive Order 12988 (Civil Justice Reform), the Office of the Solicitor has determined that the rule would not unduly burden the judicial system and that it meets the requirements of sections 3(a) and 3(b)(2) of the Order. We have proposed designating critical habitat in accordance with the provisions of the Act. To assist the public in understanding the habitat needs of the species, this proposed rule identifies the physical or biological features essential to the conservation of the species. The proposed areas of critical habitat are presented on maps, and the proposed rule provides several options for the interested public to obtain more detailed location information, if desired.

*Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.)*

This rule does not contain information collection requirements, and a submission to the Office of Management and Budget (OMB) under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 *et seq.*) is not required. We may not conduct or sponsor and you are not required to respond to a collection of information unless it displays a currently valid OMB control number.

*National Environmental Policy Act (42 U.S.C. 4321 et seq.)*

It is our position that, outside the jurisdiction of the U.S. Court of Appeals for the Tenth Circuit, we do not need to prepare environmental analyses pursuant to the National Environmental Policy Act (NEPA; 42 U.S.C. 4321 *et seq.*) in connection with regulations adopted pursuant to section 4(a) of the Act. We published a notice outlining our reasons for this determination in the *Federal Register* on October 25, 1983 (48 FR 49244). This position was upheld by the U.S. Court of Appeals for the Ninth Circuit (*Douglas County v. Babbitt*, 48 F.3d 1495 (9th Cir. 1995), cert. denied 516 U.S. 1042 (1996)).

## *Government-to-Government Relationship with Tribes*

In accordance with the President's memorandum of April 29, 1994 (Government-to-Government Relations with Native American Tribal Governments; 59 FR 22951), Executive Order 13175 (Consultation and Coordination with Indian Tribal Governments), and the Department of the Interior's manual at 512 DM 2, we readily acknowledge our responsibility to communicate meaningfully with recognized Federal Tribes on a government-to-government basis. In accordance with Secretarial Order 3206 of June 5, 1997 (American Indian Tribal Rights, Federal-Tribal Trust Responsibilities, and the Endangered Species Act), we readily acknowledge our responsibilities to work directly with Tribes in developing programs for healthy ecosystems, to acknowledge that Tribal lands are not subject to the same controls as Federal public lands, to remain sensitive to Indian culture, and to make information available to Tribes.

We determined that there are no Tribal lands that were occupied by the Miami tiger beetle at the time of listing that contain the features essential for conservation of the species, and no Tribal lands unoccupied by the Miami tiger beetle that are essential for the conservation of the species. Therefore, we are not proposing to designate critical habitat for the Miami tiger beetle on Tribal lands. As a result, there are no Tribal lands affected by the proposed designation of critical habitat for this species.

## **References Cited**

A complete list of references cited in this rulemaking is available on the Internet at <http://www.regulations.gov>.

## **Authors**

The primary authors of this proposed rule are the staff members of the Fish and Wildlife Service's Florida Ecological Services Field Office.

## **List of Subjects in 50 CFR Part 17**

Endangered and threatened species, Exports, Imports, Reporting and recordkeeping

requirements, Transportation.

## Proposed Regulation Promulgation

Accordingly, we propose to amend part 17, subchapter B of chapter I, title 50 of the Code of Federal Regulations, as set forth below:

### PART 17—ENDANGERED AND THREATENED WILDLIFE AND PLANTS

1. The authority citation for part 17 continues to read as follows:

**Authority:** 16 U.S.C. 1361–1407; 1531–1544; and 4201–4245, unless otherwise noted.

2. In § 17.11(h), revise the entry for “Beetle, Miami tiger” under “Insects” in the List of Endangered and Threatened Wildlife to read as follows:

#### § 17.11 Endangered and threatened wildlife.

\* \* \* \* \*

(h) \* \* \*

Common name	Scientific name	Where listed	Status	Listing citations and applicable rules
* * * * *				
INSECTS				
* * * * *				
Beetle, Miami tiger	<i>Cicindelidia floridana</i>	U.S.A. (FL)	E	81 FR 68985; 10/5/2016; 50 CFR 17.95(i). <sup>CH</sup>
* * * * *				

3. In § 17.95, amend paragraph (i) by adding an entry for “MIAMI TIGER BEETLE (*CICINDELIDIA FLORIDANA*)” after the entry for “HELOTES MOLD BEETLE (*BATRISODES VENYIVI*)”, to read as follows:

**§ 17.95 Critical habitat—fish and wildlife.**

\* \* \* \* \*

(i) *Insects.*

\* \* \* \* \*

MIAMI TIGER BEETLE (*CICINDELIDIA FLORIDANA*)

(1) Critical habitat units are depicted for Miami-Dade County, Florida, on the maps in this entry.

(2) Within these areas, the physical or biological features essential to the conservation of the Miami tiger beetle consist of one or more of the following components:

(i) South Florida pine rockland habitat of at least 2.5 ac (1 ha) in size that is maintained by natural or prescribed fire or other disturbance regimes; and

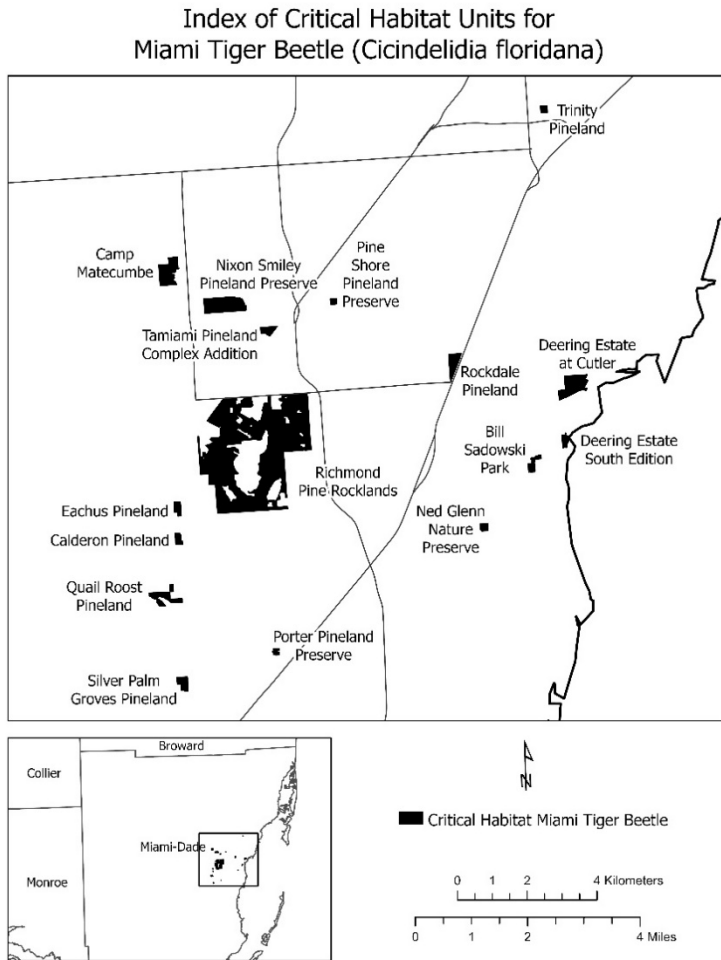
(ii) Open sandy areas within or directly adjacent to the south Florida pine rockland habitat with little to no vegetation that allows for or facilitates normal behavior and growth such as thermoregulation, foraging, egg-laying, larval development, and habitat connectivity, which promotes the overall distribution and expansion of the species.

(3) Critical habitat does not include manmade structures (such as buildings, aqueducts, runways, roads, and other paved areas) and the land on which they are located existing within the legal boundaries on the effective date of this rule.

(4) *Critical habitat map units.* Data layers defining map units were created using Esri ArcGIS mapping software. The projection used was Albers Conical Equal Area (Florida Geographic Data Library), NAD 1983 HARN. The maps in this entry, as

modified by any accompanying regulatory text, establish the boundaries of the critical habitat designation. The spatial data used to create the critical habitat unit maps are available to the public at the Service's internet site, <http://www.fws.gov/verobeach/>, or <http://www.regulations.gov> at Docket No. FWS-R4-ES-2021-0053.

(5) *Note:* Index map of all critical habitat units for Miami tiger beetle follows:

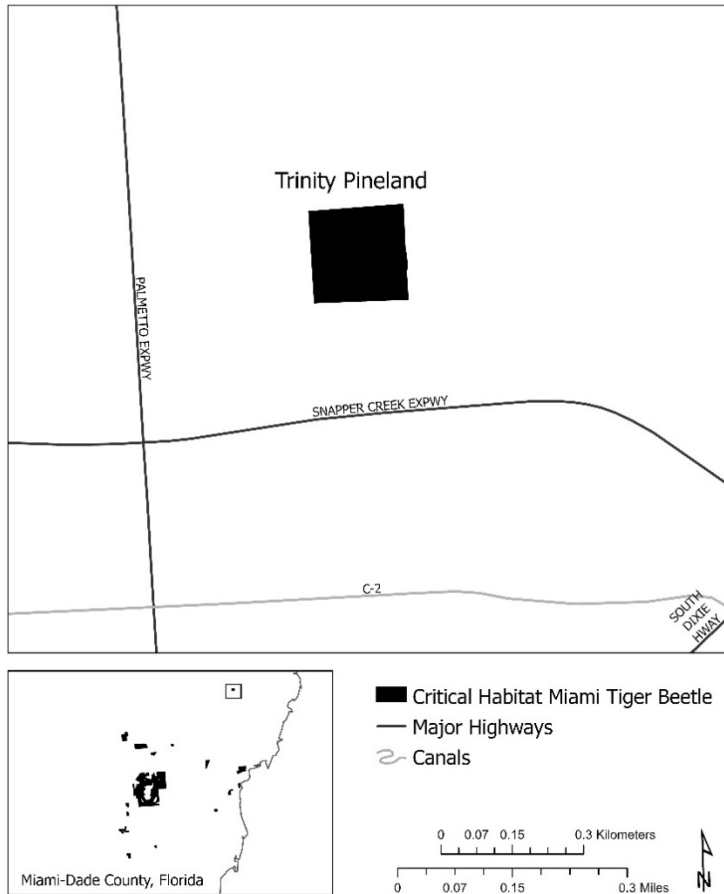


(6) Unit 1: Trinity Pineland, Miami-Dade County, Florida.

(i) Unit 1 consists of approximately 10 ac (4 ha). The unit is located between SW 72<sup>nd</sup> Street to the north, SW 80<sup>th</sup> Street to the south, South Dixie Highway to the east, and Palmetto Expressway to the west.

(ii) Map of Unit 1 follows:

Critical Habitat Unit for Miami Tiger Beetle (*Cicindelidia floridana*)  
Unit 1: Trinity Pineland, Miami-Dade County, Florida



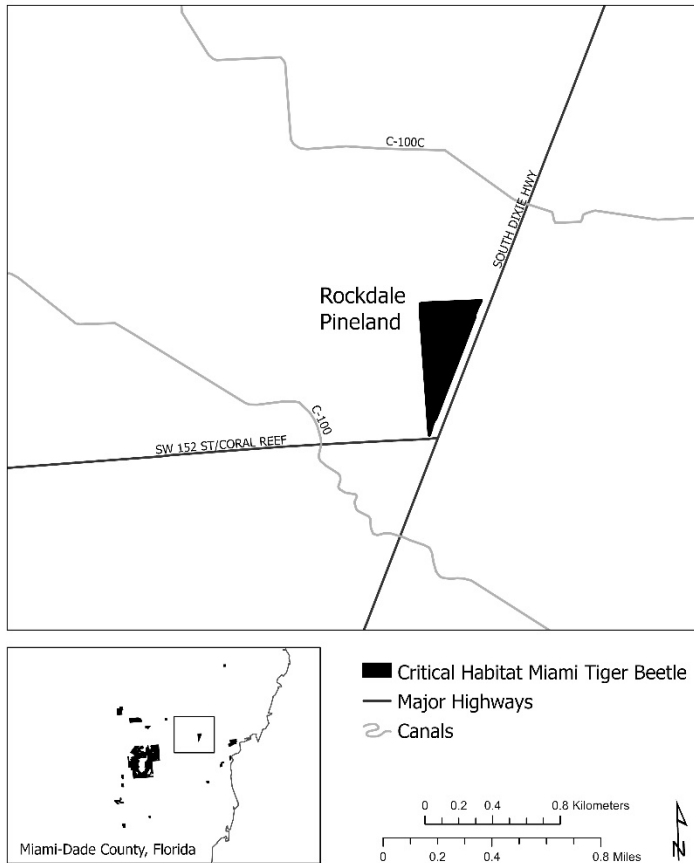
(7) Unit 2: Rockdale Pineland, Miami-Dade County, Florida.

(i) Unit 2 consists of approximately 39 ac (16 ha). The unit is located directly west of South Dixie Highway, between SW 144<sup>th</sup> Street to the north and SW 152<sup>nd</sup> Street to the south.

(ii) Map of Unit 2 follows:



Critical Habitat Unit for Miami Tiger Beetle (*Cicindelidia floridana*)  
Unit 2: Rockdale Pineland, Miami-Dade County, Florida

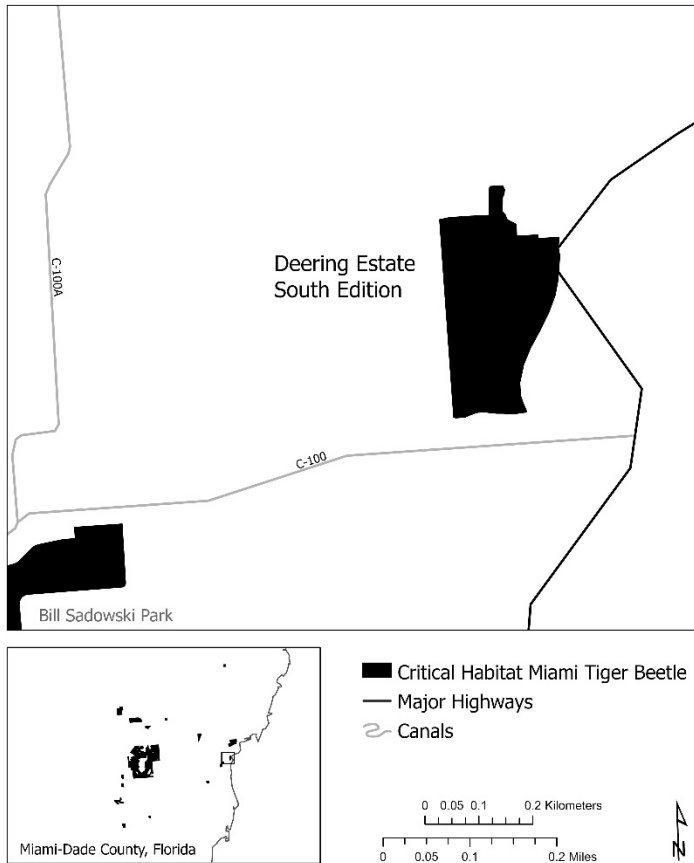


(8) Unit 3: Deering Estate South Edition, Miami-Dade County, Florida.

(i) Unit 3 consists of approximately 16 ac (6 ha). This unit is located just east of Old Cutler Road and south of 168<sup>th</sup> Street.

(ii) Map of Unit 3 follows:

Critical Habitat Unit for Miami Tiger Beetle (*Cicindelidia floridana*)  
Unit 3: Deering Estate South Edition, Miami-Dade County, Florida

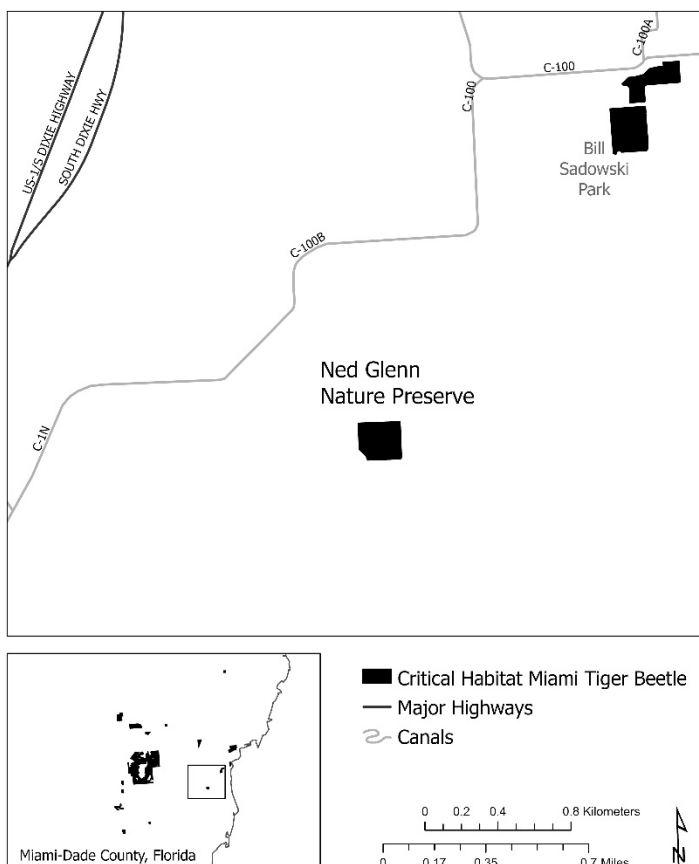


(9) Unit 4: Ned Glenn Nature Preserve, Miami-Dade County, Florida.

(i) Unit 4 consists of approximately 11 ac (4 ha). The unit is located directly west of SW 87<sup>th</sup> Avenue, between 184<sup>th</sup> Street to the north, Old Cutler Road to the south, and Franjo Road to the west.

(ii) Map of Unit 4 follows:

Critical Habitat Unit for Miami Tiger Beetle (*Cicindelidia floridana*)  
Unit 4: Ned Glenn Nature Preserve, Miami-Dade County, Florida

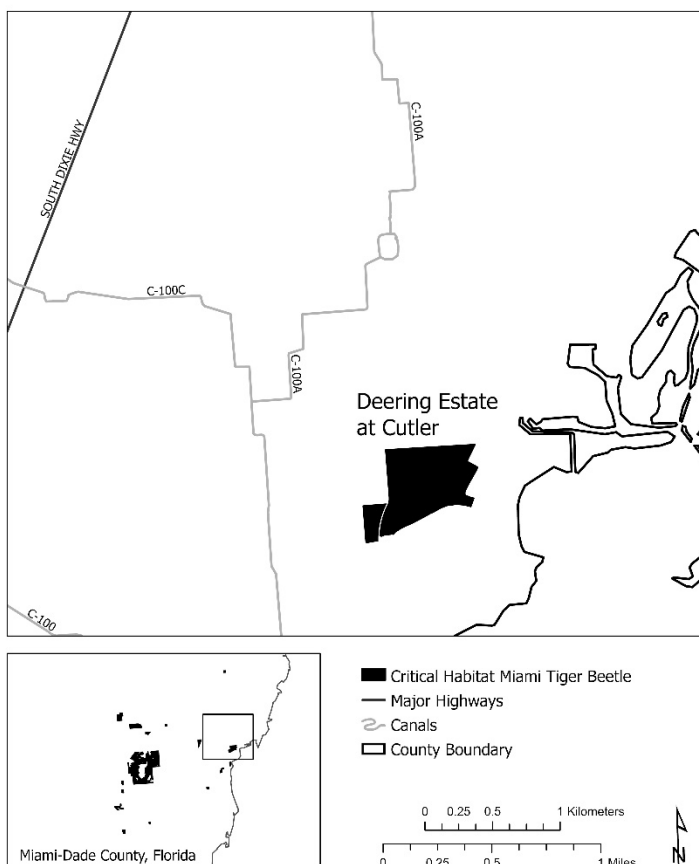


(10) Unit 5: Deering Estate at Cutler, Miami-Dade County, Florida.

(i) Unit 5 consists of approximately 89 ac (36 ha). The unit is located southeast of SW 152<sup>nd</sup> Street and Old Cutler Road.

(ii) Map of Unit 5 follows:

Critical Habitat Unit for Miami Tiger Beetle (*Cicindelidia floridana*)  
Unit 5: Deering Estate at Cutler, Miami-Dade County, Florida

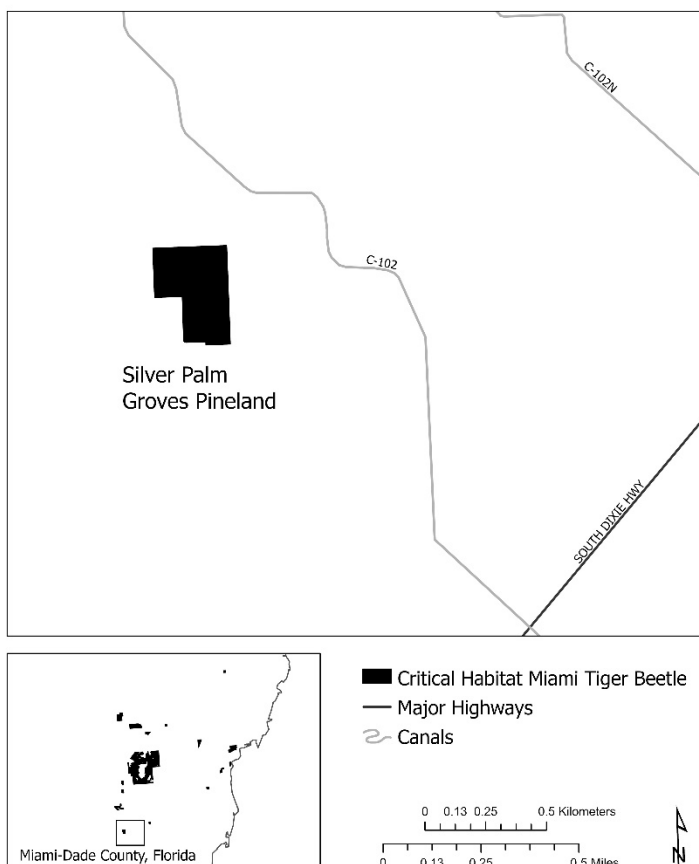


(11) Unit 6: Silver Palm Groves Pineland, Miami-Dade County, Florida.

(i) Unit 6 consists of approximately 25 ac (10 ha). This unit is located just north of SW 232<sup>nd</sup> Street, between SW 216<sup>th</sup> Street to the north, South Dixie Highway to the east, and SW 147<sup>th</sup> Avenue to the west.

(ii) Map of Unit 6 follows:

Critical Habitat Unit for Miami Tiger Beetle (*Cicindelidia floridana*)  
Unit 6: Silver Palm Groves Pineland, Miami-Dade County, Florida

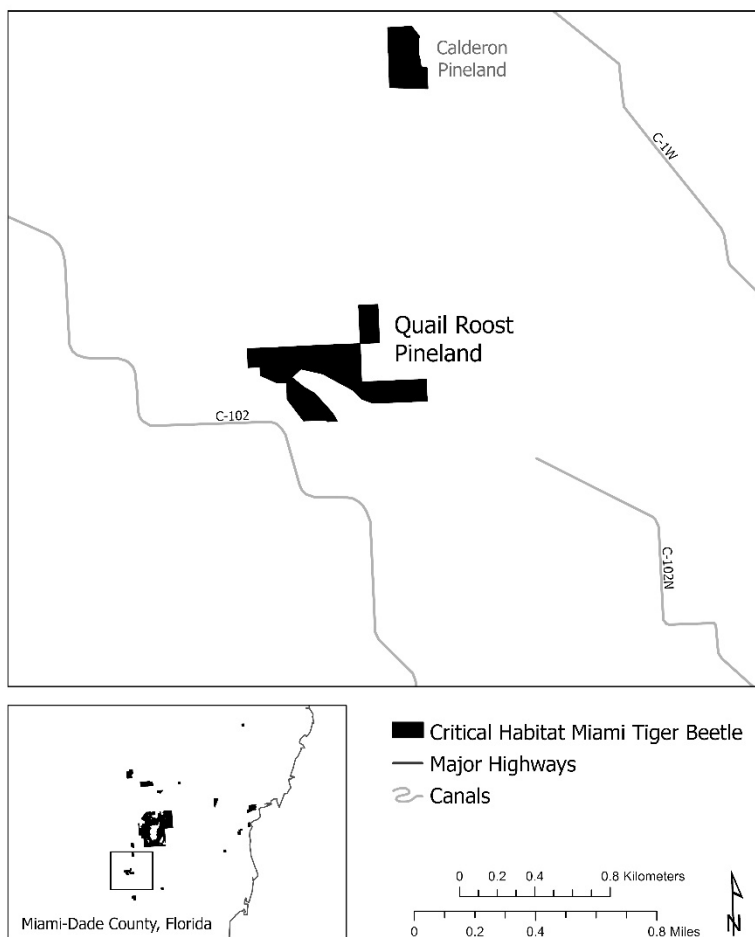


(12) Unit 7: Quail Roost Pineland, Miami-Dade County, Florida.

(i) Unit 7 consists of approximately 48 ac (19 ha). This unit is located between SW 200<sup>th</sup> Street to the north, SW 127<sup>th</sup> Avenue to the east, SW 216<sup>th</sup> Street to the south, and SW 147<sup>th</sup> Avenue to the west.

(ii) Map of Unit 7 follows:

Critical Habitat Unit for Miami Tiger Beetle (*Cicindelidia floridana*)  
Unit 7: Quail Roost Pineland, Miami-Dade County, Florida

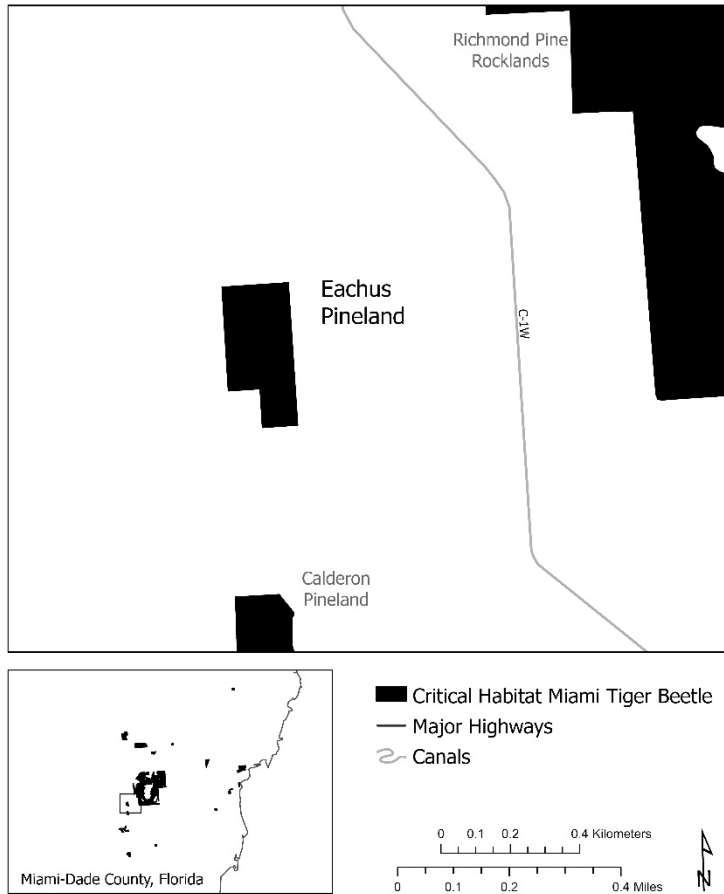


(13) Unit 8: Eachus Pineland, Miami-Dade County, Florida.

(i) Unit 8 consists of approximately 17 ac (7 ha). This unit is located between SW 180<sup>th</sup> Street to the north, SW 137<sup>th</sup> Avenue to the east, SW 184<sup>th</sup> Street to the south and SW 142<sup>th</sup> Avenue to the east.

(ii) Map of Unit 8 follows:

Critical Habitat Unit for Miami Tiger Beetle (*Cicindelia floridana*)  
Unit 8: Eachus Pineland, Miami-Dade County, Florida

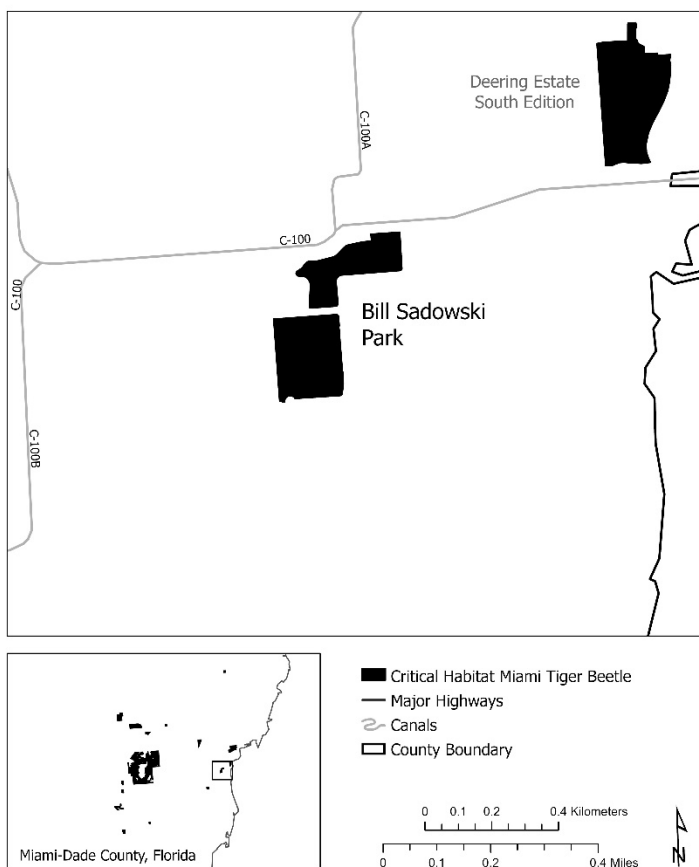


(14) Unit 9: Bill Sadowski Park, Miami-Dade County, Florida.

(i) Unit 9 consists of approximately 20 ac (8 ha). This unit is located south of 168<sup>th</sup> Street, west of Old Cutler Road, north of SW 184<sup>th</sup> Street, and east of SW 87<sup>th</sup> Avenue.

(ii) Map of Unit 9 follows:

Critical Habitat Unit for Miami Tiger Beetle (*Cicindelidia floridana*)  
Unit 9: Bill Sadowski Park, Miami-Dade County, Florida



(15) Unit 10: Tamiami Pineland Complex Addition, Miami-Dade County, Florida.

(i) Unit 10 consists of approximately 21 ac (8 ha). This unit is located south of 128<sup>th</sup> Street, west of Florida's Turnpike, north of SW 136<sup>th</sup> Street, and east of SW 127<sup>th</sup> Avenue.

(ii) Map of Unit 10 follows:



Nixon Smiley  
Pineland Preserve

Tamiami Pineland  
Complex Addition

I-4  
I-75

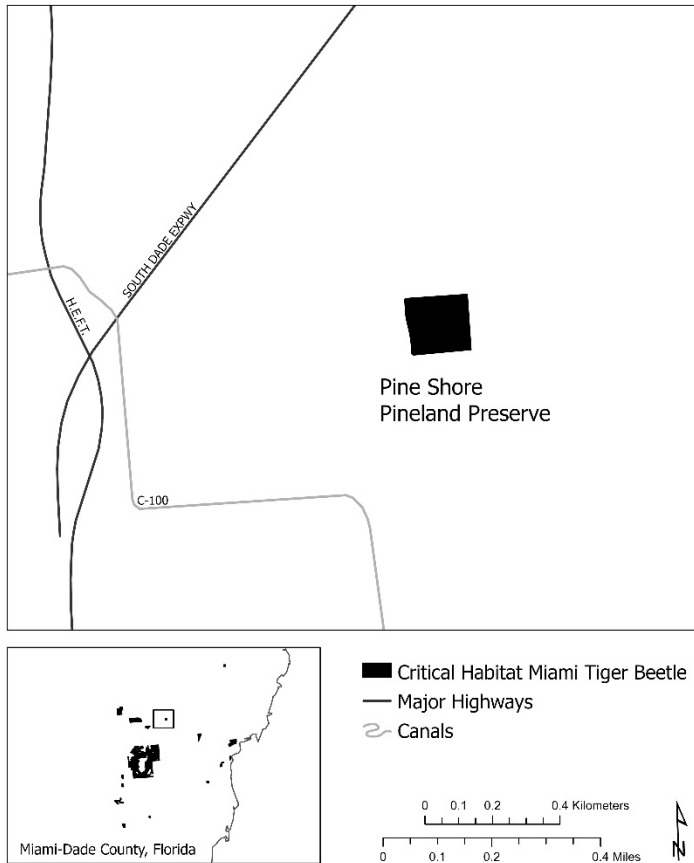
TAMIAMI TRAIL

SOUTH DADE EXPRESSWAY

C-100



Critical Habitat Unit for Miami Tiger Beetle (*Cicindelidia floridana*)  
Unit 11: Pine Shore Pineland Preserve, Miami-Dade County, Florida

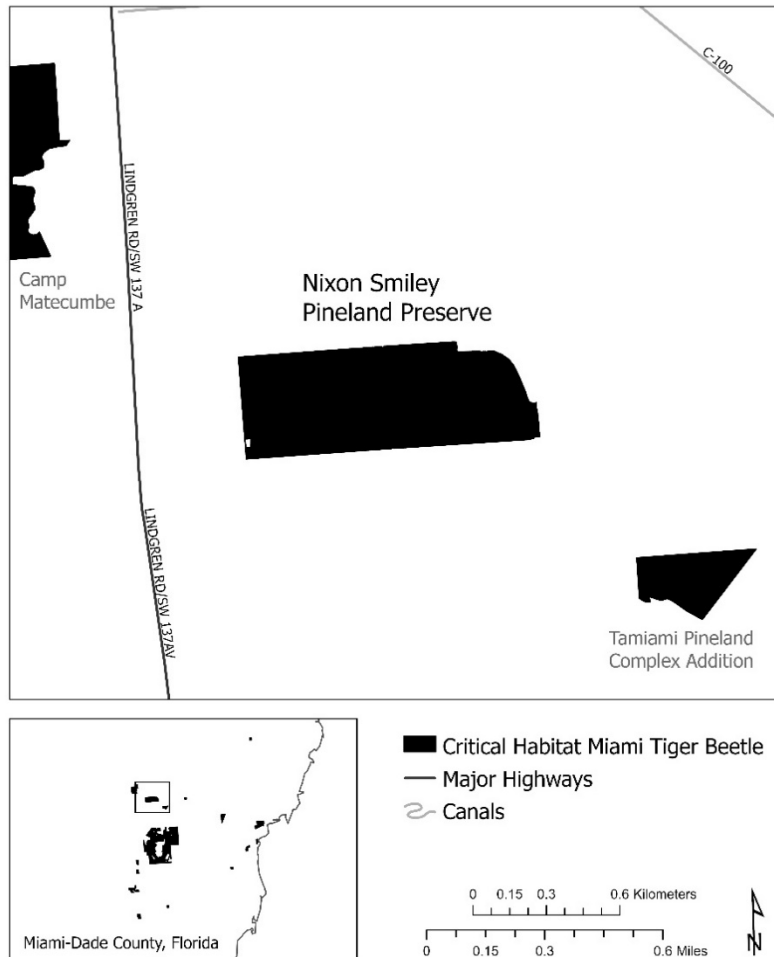


(17) Unit 12: Nixon Smiley Pineland Preserve, Miami-Dade County, Florida.

(i) Unit 12 consists of approximately 117 ac (47 ha). This unit is located between SW 120 Street to the north, SW 127<sup>th</sup> Avenue to the east, SW 128<sup>th</sup> Street to the south, and SW 137<sup>th</sup> Avenue to the west.

(ii) Map of Unit 12 follows:

Critical Habitat Unit for Miami Tiger Beetle (*Cicindelia floridana*)  
Unit 12: Nixon Smiley Pineland Preserve, Miami-Dade County, Florida

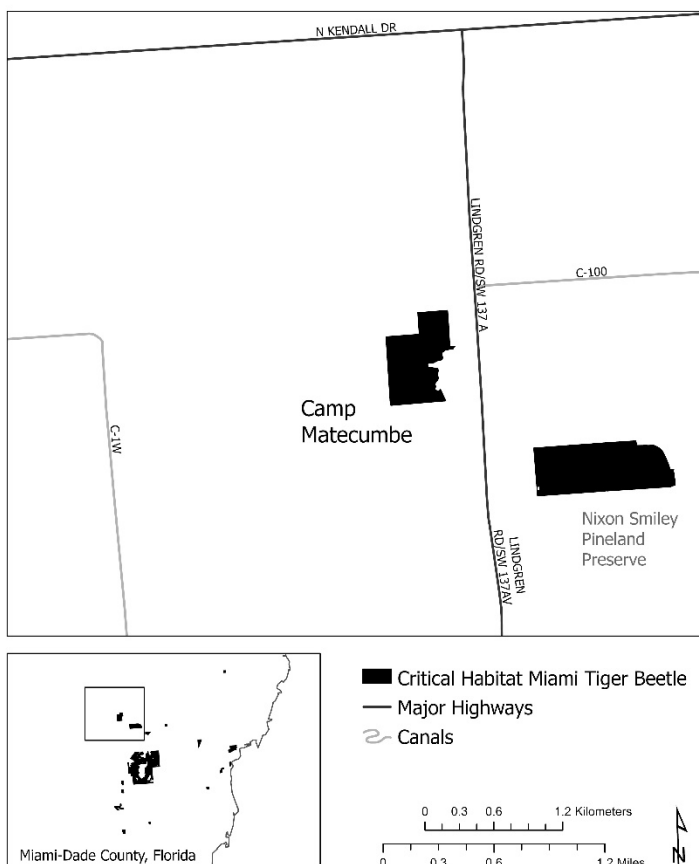


(18) Unit 13: Camp Matecumbe, Miami-Dade County, Florida.

(i) Unit 13 consists of approximately 81 ac (33 ha). This unit is between SW 104<sup>th</sup> Street to the north, SW 137<sup>th</sup> Avenue to the east, SW 12<sup>th</sup> Street to the south, and SW 147<sup>th</sup> Avenue to the west.

(ii) Map of Unit 13 follows:

Critical Habitat Unit for Miami Tiger Beetle (*Cicindelidia floridana*)  
Unit 13: Camp Matecumbe, Miami-Dade County, Florida

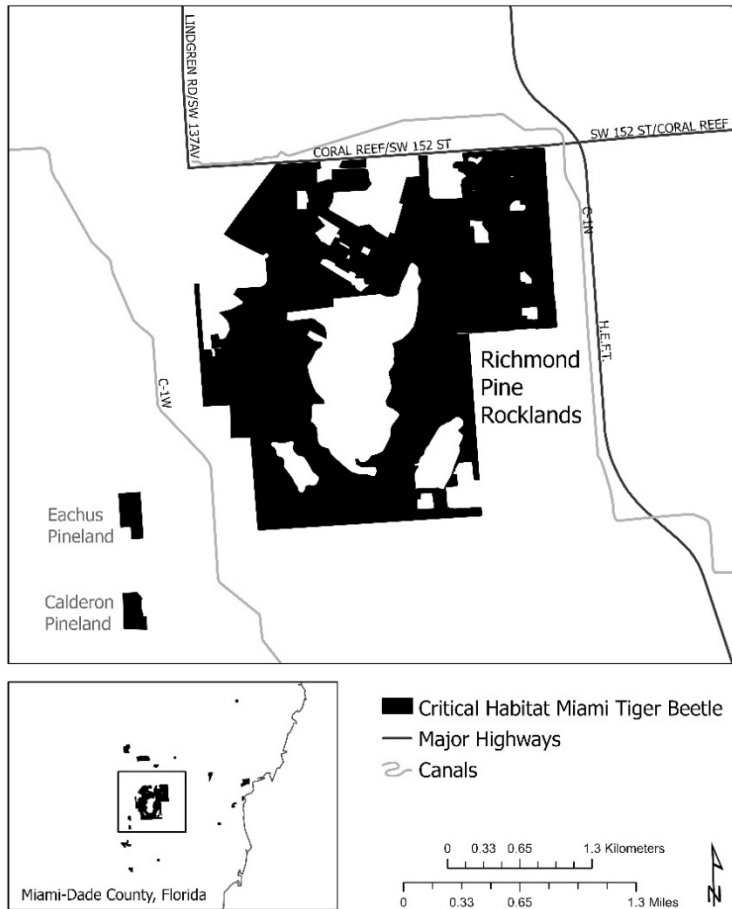


(19) Unit 14: Richmond Pine Rocklands, Miami-Dade County, Florida.

(i) Unit 14 consists of approximately 1,455 ac (589 ha). This unit is located between SW 152<sup>nd</sup> Street to the north, SW 117<sup>th</sup> Avenue to the east, SW 185<sup>th</sup> Street to the south, and SW 137<sup>th</sup> Avenue to the west.

(ii) Map of Unit 14 follows:

Critical Habitat Unit for Miami Tiger Beetle (*Cicindelia floridana*)  
Unit 14: Richmond Pine Rocklands, Miami-Dade County, Florida

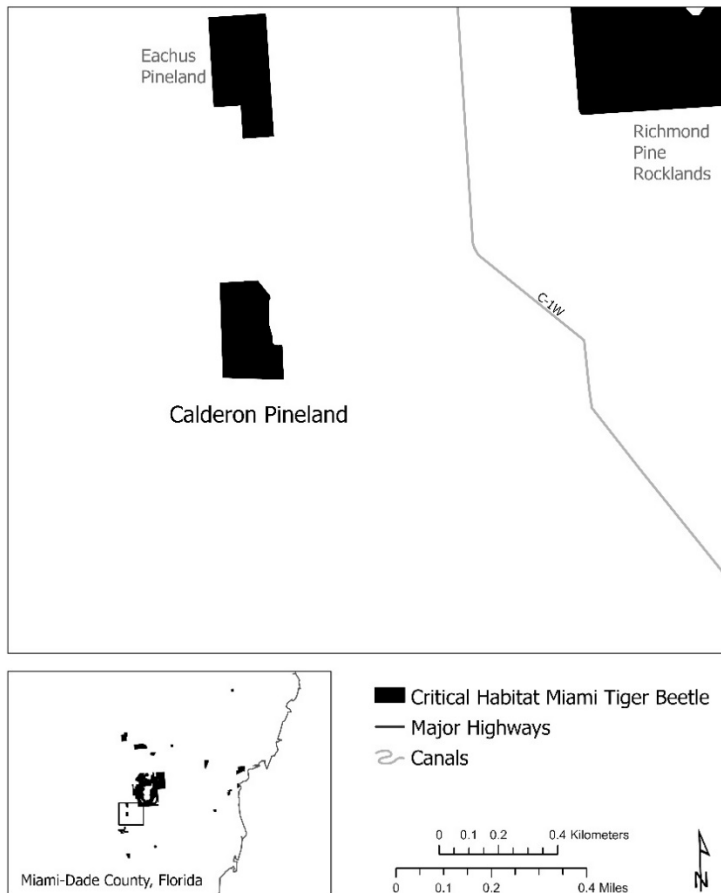


(20) Unit 15: Calderon Pineland, Miami-Dade County, Florida.

(i) Unit 15 consists of approximately 14 ac (6 ha). This unit is located between SW 184<sup>th</sup> Street to the south, SW 137<sup>th</sup> Avenue to the east, SW 200<sup>th</sup> Street to the south, and SW 147<sup>th</sup> Avenue to the west.

(ii) Map of Unit 15 follows:

Critical Habitat Unit for Miami Tiger Beetle (*Cicindelidia floridana*)  
Unit 15: Calderon Pineland, Miami-Dade County, Florida

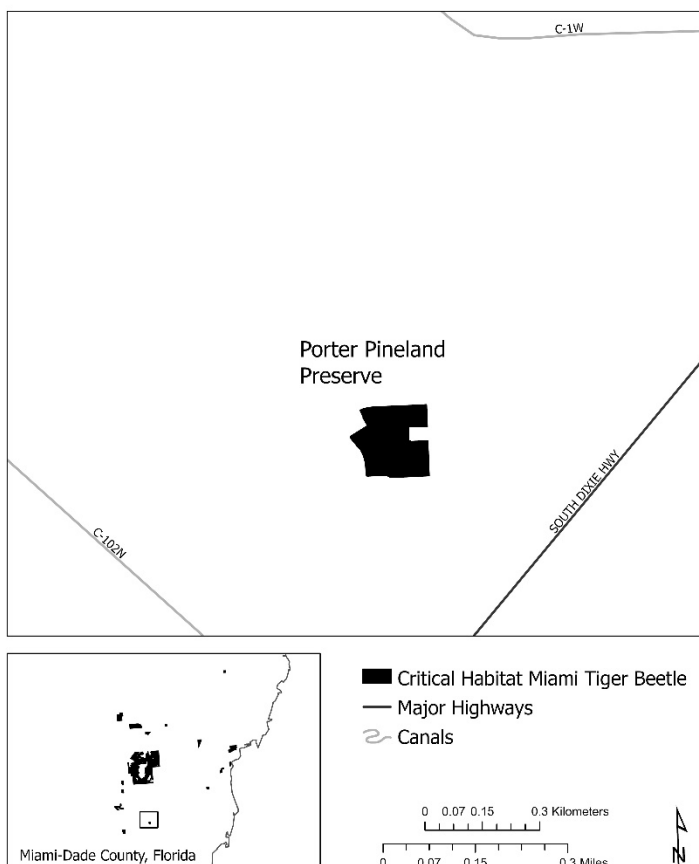


21) Unit 16: Porter Pineland Preserve, Miami-Dade County, Florida.

(i) Unit 16 consists of approximately 7 ac (3 ha). This unit is located to the south of SW 216<sup>th</sup> Street, to the west of South Dixie Highway, to the north of SW 232<sup>nd</sup> Street, and to the east of SW 147<sup>th</sup> Avenue.

(ii) Map of Unit 16 follows:

Critical Habitat Unit for Miami Tiger Beetle (*Cicindelidia floridana*)  
Unit 16: Porter Pineland Preserve, Miami-Dade County, Florida



\* \* \* \* \*

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**Martha Williams**

*Principal Deputy Director*

*Exercising the Delegated Authority of the Director*

*U.S. Fish and Wildlife Service*

[FR Doc. 2021-19088 Filed: 9/3/2021 8:45 am; Publication Date: 9/7/2021]